

Information to Bidder for the “Supply of OTDR, Splicing Machine, Cable Locator, Laser Source, Power Meter, Tool Kit, Patch cord, Attenuators, FMS, Joint Enclosures & pigtails through GeM Bid ”

Ref: GeM Bid No. GEM/2023/B/*** dated:**

- The item/items in this bid should be quoted as per the technical specifications. *The details of the specifications along with consignee/site details are also available on website www.railtelindia.com*

(The technical specs which are not available on GeM portal for the required product, same will be uploaded in ATC/ITB as one time exercise. In future all the specs will be available on GeM portal.).

1. In the specification wherever support for a feature has been asked for, it will mean that the feature should be available without RailTel requiring any other hardware/software/licenses. Thus, all hardware/software/licenses required for enabling the support/feature shall be included in the offer. The technical specifications are mentioned in **Annexure-I**.
2. OEM or Authorized distributor/Partner of OEM should have a registered office in India to provide sales and 24x7 support in India. The certificate to this effect should be submitted. The bidder should be either OEM or his authorized dealer/distributor.
3. In case of the authorized distributor/partner certificate from the OEM to this effect should be submitted. If OEM is quoting then OEM should submit the certificate. **In the tender, either the manufacturer or its authorized dealer will be considered as valid bidders. In cases where the manufacturer has submitted the bid, the bids of its authorized dealer will not be considered and EMD will be returned. And in case of violations, both infringing bids will be rejected.**
4. Equipment offered shall have complete data sheets and detailed description on OEM web sites.
5. Bidder shall submit the detailed BOM of the equipment offered duly verified and certified by the respective OEM.
6. GSTIN RC of vendor for state should be provided from where goods will be supplied.
7. **Validity of offer, Delivery Period, Consignee Address, Inspection**

7.1 Validity of Offer: 65 days from the date of opening.

7.2 Delivery Period: The supplier will have to supply the material within 90 days from the date of issue of confirmed LOA/PO. If material is not supplied within the approved delivery period then penalty of 0.5% of undelivered/uninstalled

quantity per week to the maximum to the 10% of the contract value will be levied.

7.3 Consignee Address:

**Sr. Manager/Stores,
RailTel Office, New Delhi,
Microwave Complex, Thompson Road
Northern Region.**

7.4 Inspection: Inspection shall be carried out by authorized representative of RailTel's.

8. Estimated cost of tender & Earnest Money Deposit (EMD)/ Bid Security:

8.1 Estimated cost of tender: Estimated cost of the Tender is Rs. **1,60,63,303/-** (Incl. GST).

8.2 Earnest Money Deposit (EMD)/ Bid Security: Earnest Money Deposit (EMD)/ Bid Security: Rs. 3,21,266/- in the form of Pay Order/ Demand Draft drawn in favor of RailTel Corporation of India Ltd. payable at New Delhi on or before 15:00 Hrs of Bid Opening Date. **The Bid received without EMD will be summarily rejected.**

8.3 In addition to clause 8.2 above, Tenderer has an option for online submission of EMD also. The EMD should be remitted in following account of RailTel Corporation of India Limited before the stipulated time and date of bid submission:

Name of bank & address	Union Bank of India, 14/15-F, Connaught Place, New Delhi- 110001.
Name of Account holder	RAILTEL CORPORATION OF INDIA LIMITED N R COLLECTION A/C (RCIL)
Account No.	307801010917906
IFSC Code	UBIN0530786
Branch/MICR Code	Connaught Place/110026006

8.4 Eligible MSEs are exempted from EMD.

8.5 Any bid not accomplished with a valid EMD shall be summarily rejected.

8.6 The EMD may be forfeited if a bidder withdraws his offer or modifies the terms and conditions of the offer during validity period and in the case of a successful bidder, if the bidder fails to accept the Letter of Acceptance (LOA) and fails to furnish performance bank guarantee (security deposit) in accordance with clause 10.

- 8.7 Earnest Money of the unsuccessful bidder will be discharged / returned as promptly as possible but not later than 30 days after the expiry of the period of offer / bid validity prescribed by the Purchaser.
- 8.8 The successful bidder's EMD will be discharged upon the bidder's acceptance of the Advanced purchase order satisfactorily and furnishing the performance bank guarantee in accordance with clause 10.
- 8.9 Earnest Money will bear no interest.

Note : (1) Small scale Units registered with NSIC/MSEs under single point registration scheme shall be exempted from depositing Earnest money as per Govt of India Guidelines.

(2) In case of any wrong information submitted by tenderer, the contract shall be terminated. Earnest Money Deposit (EMD), Performance Guarantee (PG) and Security Deposit (SD) of contract forfeited and agency barred for doing business on RailTel(RCIL) for 5 (five) years.

9. This bid complies with "Public Procurement (preference to make in India) Policy Order, 2017 issued by DIPP and Public Procurement Policy for Micro and Small Enterprises (MSEs) order,2012" issued by MoSME."

The bidders claiming the preference have to submit relevant documents prescribed under relevant order.

10. Security Deposit/Performance Guarantee:

The successful tenderer shall submit security deposit in the form of DD/irrevocable BG from any scheduled bank for due fulfillment of contract as per the Performance Guarantee details given below:

i. Security Deposit/Performance Guarantee @ 3% of total value of Purchase Order is required to be submitted within 30 days of issue of Purchase Order with validity of 3 months beyond warranty period, failing which a penal interest of 15% per annum shall be charged for the delay period i.e. beyond 30 (thirty) days from the date of issue of LOA/PO.

ii. The security deposit/PG shall be submitted to RCIL/RO/NR, Shastri Park, Delhi.

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

The security deposit/Performance Guarantee shall be refunded to the contractor without interest after duly performs and complete the contract in all respect after 60 days of completion of all such obligations including the warranty under the contract,duly adjusting any dues recoverable from the successful tenderer. Payment of Security Deposit in the form of Pay Order/Demand Draft should be made in favor of "RailTel Corporation of India

Ltd” payable at New Delhi.

Note: (1) In case value of PG comes to Rs. 5 Lakhs or less, same should be submitted in the form of DD/Banker cheque only.

(2) Performa for bank guarantee. (Annexure-III)

11. Eligibility Criteria for OEM:

- The equipment offered by the OEM or equipment of the same series/family from the same OEM should have been satisfactorily working in Government /PSUs/Telecom Service Providers network for at least 12 months as on opening of bid, in India or Abroad. The certificates from the actual users will have to be submitted online.
- The OEM should have supplied at least 35% of the tendered quantity (rounded to the nearest whole number) of the equipment offered or equipment of the same series/family during last preceding 3 financial years (i.e. current year and three previous financial years) as on opening of bid to Government/PSUs/Telecom Service Providers. OEM should submit self-certificate with proper contact detail of clients along with quantities supplied (Firm Name, Contact person, Designation, Telephone Number, Fax, Official mail id etc.). The same should be issued by authorized signatory.
- The OEM should have proven facilities for Engineering /manufacture/ assembly/ integration and testing of **OTDR, Splicing Machine, Cable Locator,Laser Source,Power Meter,Joint Enclosure** and basic facilities with respect to space, Engineering, Personnel, Test equipment, Manufacture, Training, Repair, Service Center Supports for at least past three years in the country from where the proposed equipment are planned to be supplied. In case OEM is located outside India, it should have training repair and service center facilities in India also. The certificates/Undertaking for the same will have to be submitted online.

(The bidder will have to submit the proof of establishment for the facility)

12. Eligibility Criteria:

12.1 Technical Eligibility for Bidder:

The tenderer must have successfully completed any of the following during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:

- Three similar works# each costing not less than the amount equal to 30% of advertised value of the tender, or
- Two similar works# each costing not less than the amount equal to 40% of advertised value of the tender, or
- One similar work # each costing not less than the amount equal to 60% of advertised value of the tender.

12.2 Definition of Similar Work: Supply of OFC maintenance measuring / testing instruments (OTDR/Splicing Machine/Cable Locator/Laser Source/Power Meter)

Note: Work experience certificate from private individual shall not be considered. However, in addition to work experience certificates issued by any Govt. Organization, PSU or any reputed TELCO, work experience certificate issued by Public listed company having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at least 5 years prior to the date of opening of tender, shall also be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such certificates. In case tenderer submits work experience certificate issued by public listed company, the tenderer shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate

12.3 Financial Criteria for Bidder:

The tenderer must have received total contractual payments/operating turnover in the previous three financial years and the current financial year up to the date of inviting of tender, at least 150% of the advertised value of the tender. The tenderers shall submit Certificates to this effect which may be an attested Certificate from the concerned department / client or Audited Balance Sheet /Certificate from Chartered Accountant duly supported by Audited Balance Sheet. (Note: Client certificate from other than Govt. Organization should be duly supported by Form 16A/26AS generated through TRACES of Income Tax Department of India).

Credentials if submitted in foreign currency shall be converted into Indian currency i.e., Indian Rupee as under: The conversion rate of US Dollars into Rupees shall be the daily representative exchange rates published by the Reserve Bank of India for the relevant date. Where, relevant date shall be as on the last day of month previous to the one in which tender is invited. In case of any other currency, the same shall first be converted to US Dollars as on the last day of month previous to the one in which tender is invited, and the amount so derived in US Dollars shall be converted into Rupees at the aforesaid rate. The conversion rate of such currencies shall be the daily representative exchange rates published by the International Monetary Fund for the relevant date.

13. Bidder should have authorization specific to this tender from respective OEM as per Annex-IV.

14. Splitting of Quantity:

14.1 Deleted

- 14.2 In case bidder claims PMA, Government of India Guideline/Instruction regarding splitting of order to Local supplier shall be applicable. Govt. Guidelines in regard to MSME shall be followed.

15. Warranty:

The materials are to be warranted for **24 months** from the date of delivery to the consignee. The supplier shall warrant that stores to be supplied shall be new and free from all defects and faults in material, workmanship and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards of materials of the type ordered and shall perform in full conformity with the specifications and drawings.

The supplier shall be responsible for any defects that may develop under the conditions provided by the contract and under proper use, arising from faulty materials, design or workmanship such as corrosion, inadequate quantity of material to meet Cards/Modules requirements, inadequate contact protection, deficiencies in 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.

16. SLA:

After having been notified of the defects / service requirement during warranty period, Seller has to complete the required Service / Rectification within time limit of max. 7 days. If the Seller fails to complete service / rectification within defined time limit, a penalty of 0.5% of Unit Price of the product shall be charged as penalty for each week of delay from the seller & upto max. of 100% of Unit Price of the product. Seller can deposit the penalty with the Buyer directly else the Buyer shall have a right to recover all such penalty amount from the Performance Security (PBG) or from the running bills.

17. Purchaser's Right to Vary the quantities:

The purchaser shall be at liberty to enhance or reduce the quantity mentioned in the LOA as indicated in below para without assigning any reasons. The bidder shall comply with such modifications unconditionally provided these are made before completion of the deliveries under the purchase order/LOA.

(A) Upto maximum extent of +/- 50% subject to following condition

- i. Upto +25% with no rebate.
- ii. From +25% to +40% with 2% rebate
- iii. From +40% to +50% with 4% rebate

(B) For variation beyond +50% of the quantity mentioned in the SOR may be done after proper

negotiation with the selected bidder.

18. Payment Conditions: -

- (i) 100% payment on full supply.
- (ii) 80% payment against part supply of the ordered quantity. In case bidder completes the supply order for one SOR, he can claim part payment of 80% against each SOR's completed supply of the said SORs. Balance payment shall be made after full supply. The following documents are to be submitted for payment:
 - Original Tax Invoice. (With separate Tax amount, containing POS, RailTel GSTN and Supplier GSTN).
 - Delivery Challan.
 - Original Consignee receipt.
 - Original Inspection Certificate.
 - Transit Insurance Certificate.
 - Warranty Certificate of OEM.
 - Proof of SD/PG submitted.
 - Certificate of receipt of Goods in good condition & installation thereof from RailTel.
 - Declaration of non-applicability of e-invoicing, if applicable.
 - Declaration regarding 206AB/206CCA of IT act.

19. The tenderers shall submit an certificate on paper stating that they are not liable to be disqualified and all their statement/documents submitted along with bid are true and factual. Standard format of the certificate to be submitted online by the bidder is enclosed as **Annexure-V. Non submission of certificate by the bidder shall result in summarily rejection of his/their bid.** And it shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting **documents duly self attested** by which they/he is qualifying the Qualifying Criteria mentioned in the Tender Document. It will not be obligatory on the part of Tender Committee to scrutinize beyond the submitted document of tenderer as far as his qualification for the tender is concerned.

The RailTel(RCIL) reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the RailTel(RCIL), make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification by the RailTel(RCIL) shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the RailTel thereunder.

In case of any wrong information submitted by tenderer, the contract shall be terminated. Earnest Money Deposit (EMD), Performance Guarantee (PG) and Security

Deposit (SD) of contract forfeited and agency barred for doing business on RailTel(RCIL) for 5 (five) years.

20. Power of Attorney:

Power of attorney in favor of the signatory duly authorizing the signatory shall be submitted online before the due date and time of submission of the e-Tender and Original copy is needed to be submitted by the successful bidder before issuance of PO.

21. On line Submissions:

The bidder is required to upload and submit the following documents on line before due date & time of bid. The due date & time for closing of the bid is ____ Hrs of __.__.____ and the bid will be opened at ____ Hrs of __.__.____.

- (i) Offer letter as per Annexure-II.
- (ii) EMD Submission details.
- (iii) BOQ of offered equipment.
- (iv) Clause wise compliance along with all mentioned documents/annexures for all clauses of GeM Bid and ATC documents.
- (v) Data Sheet of offered equipment.
- (vi) Financial (Certified copies of audited balance sheets/annual reports of last three preceding financial years) and Technical Eligibility Criteria documents.
- (vii) Technical Compliance of all Specification of items as per GeM Bid and ATC documents, as per Annexure-IX (Technical Specification Compliance Sheet)
- (viii) Certificate from the End user against the Eligibility criteria for OEM para 11.
- (ix) Proof of document required against Eligibility criteria of OEM and Bidder vide para 11 & 12 respectively.
- (x) MAF/OEM Authorization as per Annexure-IV.
- (xi) Standard format of certificate as per Annexure-V.
- (xii) Declaration as per Annexure-VI.
- (xiii) Nil Deviation as per Proforma attached in Annexure-VII.
- (xiv) Power of Attorney as per clause 20.
- (xv) Digitally signed copy of ITB.

Scanned copy of the Documents to be uploaded along with offer

SN	Subject/Content	Required Documents/Form	Action if required documents not submitted along with the tender
1	Earnest Money Deposit	Rs. 3,21,266/- in the form of NEFT/ Demand Draft drawn in favor of RailTel Corporation of India Ltd. payable at New Delhi on or before 15:00 Hrs of DD/MM/YYYY (Bid Opening Date). Bank detail as mentioned in clause 8. Note: (i) In case of NEFT/demand draft scan copy of EMD should be submitted along with offer. (ii) Original copy of demand draft has to be submitted to concern tendering department at RCIL/RO/NR, Shastri Park, Delhi	Summarily Rejected (Small scale Units registered with NSIC/MSEs under single point registration scheme shall be exempted from EMD cost)
2	Constitution of Firm		Liable to be Rejected
A	In case of Sole Proprietorship Concern	Notarised Proprietorship deed on stamp paper.	
	In case of a "Partnership Firm/Concern"	1) Notary certified copy of the Partnership Deed. 2) Document(s) in support of Registration of firm with Registrar of firms which includes Certificate of registration and Register of firm (Form No. may vary from State to State)(as applicable) etc. issued by Registrar of firms. 3) Notarised/Registered Power of Attorney in favour of the individual signing the tender document authorized by all the partners to act on behalf of the firm and create liability against the Firm. 4) An undertaking by all partners of the partnership firm that they are not blacklisted or debarred by Railways/Railtel or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of opening of bids, either in their individual capacity or in any firm in which they were / are partners. Note: Authorisation given in POA only will be considered irrespective of any authorization that may have given in Partnership Deed. In case of non-submission of POA or invalid POA, offer is liable to be rejected.	

C	In case of a “Company”	(i) Copies of the AOA/MOA (Article of Association / Memorandum of Association) of the Company; (ii) A copy of certificate of incorporation. (iii) A copy of Authorization/Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual to sign the tender on behalf of the company and create liability against the company (iv) An Undertaking that the company is not black listed or debarred by Railways/Railtel or any other Ministry/Department of Govt. of India from participation in tender on the date of opening of bids, either in individual capacity or as a member of the partnership firm.	
3.	Technical Eligibility Criteria	Completion/Performance Certificate in support of similar nature of work as per clause 12.2 of tender document.	Summarily Rejected
4.	Financial Eligibility Criteria	Contractual payment received as per clause 12.3 of tender document.	Summarily Rejected
5.	Annexure -VII	Statement of deviation	Liable to be Rejected
6.	Annexure-V	Standard format of certificate	Summarily Rejected

Note: 1) The bidder is required to give acceptance of all the clauses mentioned in the “**Information to the Bidders**” document is mandatory. Any deviation / non-acceptance may lead to rejection of the bid.

2) Information to Bidder viz. corrigendum /addendum/ amendments etc. for this bid shall be posted on www.railtelindia.com only.

3) This bid is governed by the Specific Additional Terms & Conditions and General Terms & Conditions laid down by the GeM against **GeM Bid No: _____**.

In case, If any contradiction between GeM Additional Terms & Conditions and General Terms & Conditions, RailTel Terms & Conditions will prevails.

Technical Specifications**1. All Equipment should be:**

- i. With 24 month warranty.
- ii. Equipped with necessary hardware/software to comply all above required / support features.
- iii. Back-to-Back warranty with respective OEMs for both Hardware and Software. The certificates/Undertaking for the same will have to be submitted along with bid from respective OEM.
- iv. OEM (**Optical Fiber Splicing, OTDR, Cable Locator ,Laser Light Source, Optical Power meter**) should have its Service Centre at min 04 locations in major cities in India. Service center details to be shared along with address and contact no. and person.
- v. UL, CE and FCC Certification is not required for PMA. However, they have to produce certificate from standard lab approved/ authorized by Govt. of India that their product are equivalent to UL, CE and FCC and meets all standard and specification of UL, CE and FCC.

2. SOR wise details are as:

SOR	Item Description	Unit	Qty.
SOR-1	Optical Fiber Splicing Machine as per technical specifications of SOR-1 of Information to Bidder	Nos.	16
SOR-2	Optical Time Domain Reflectometer (OTDR) as per technical specifications of SOR-2 of Information to Bidder	Nos.	16
SOR-3	Cable Locator as per technical specifications of SOR-3 of Information to Bidder	Nos.	6
SOR-4	Optical Laser Light Source as per technical specifications of SOR-4 of Information to Bidder	Nos.	8
SOR-5	Optical Power Meter as per technical specifications of SOR-5 of Information to Bidder	Nos.	6
SOR-6	Optical Tool Kit as per technical specifications of SOR-6 of Information to Bidder	Nos.	11
SOR-7	Joint Enclosure (24 Fiber) as per technical specifications of SOR-7 of Information to Bidder	Nos.	1300
SOR-8	Box Type Joint Enclosure (12 Fiber)	Nos.	200
SOR-9	Patch cord LC - LC (1m) as per technical specifications of SOR-9 of Information to Bidder	Nos.	700
SOR-10	Patch Cord SC - SC (1m) as per technical specifications of SOR-10 of Information to Bidder	Nos.	40

SOR-11	Patch Cord LC - LC (3m) as per technical specifications of SOR-11 of Information to Bidder	Nos.	800
SOR-12	Patch Cord LC - LC (5m) as per technical specifications of SOR-12 of Information to Bidder	Nos.	258
SOR-13	Patch Cord SC - SC(3m) as per technical specifications of SOR-13 of Information to Bidder	Nos.	270
SOR-14	Patch Cord SC - SC(5 m) as per technical specifications of SOR-14 of Information to Bidder	Nos.	180
SOR-15	Patch Cord SC - SC(10 m) as per technical specifications of SOR-15 of Information to Bidder	Nos.	10
SOR-16	Patch Cord SC - FC(5 m) as per technical specifications of SOR-16 of Information to Bidder	Nos.	50
SOR-17	Patch Cord LC-FC(3m) as per technical specifications of SOR-17 of Information to Bidder	Nos.	50
SOR-18	Patch Cord E2K-LC (3m) as per technical specifications of SOR-18 of Information to Bidder	Nos.	254
SOR-19	Patch Cord E2K-LC (5m) as per technical specifications of SOR-19 of Information to Bidder	Nos.	1730
SOR-20	Patch Cord E2K-SCAPC(5m) as per technical specifications of SOR-20 of Information to Bidder	Nos.	4
SOR-21	Patch Cord E2K-LC(10m) as per technical specifications of SOR-21 of Information to Bidder	Nos.	200
SOR-22	Patch Cord LC-FC(10m) as per technical specifications of SOR-22 of Information to Bidder	Nos.	50
SOR-23	Patch Cord LC-LC(10m) as per technical specifications of SOR-23 of Information to Bidder	Nos.	210
SOR-24	Patch Cord LC-SC(5m) as per technical specifications of SOR-24 of Information to Bidder	Nos.	400
SOR-25	Patch Cord LC-SC(10m) as per technical specifications of SOR-25 of Information to Bidder	Nos.	650
SOR-26	Patch Cord LC-SC(15m) as per technical specifications of SOR-26 of Information to Bidder	Nos.	100
SOR-27	Patch Cord E2K-LC(15m) as per technical specifications of SOR-27 of Information to Bidder	Nos.	700
SOR-28	Patch Cord LC-FC(15m) as per technical specifications of SOR-28 of Information to Bidder	Nos.	120
SOR-29	Patch Cord E2K-FC(15m) as per technical specifications of SOR-29 of Information to Bidder	Nos.	50
SOR-30	Patch Cord FC-FC(15m) as per technical specifications of SOR-30 of Information to Bidder	Nos.	50
SOR-31	Patch Cord SC-FC(15m) as per technical specifications of SOR-31 of Information to Bidder	Nos.	50
SOR-32	Patch Cord E2K - SC(15m) as per technical specifications of SOR-32 of Information to Bidder	Nos.	50

SOR-33	Patch Cord LC - LC (15 m) as per technical specifications of SOR-33 of Information to Bidder	Nos.	100
SOR-34	Patch Cord LC - LC (20m) as per technical specifications of SOR-34 of Information to Bidder	Nos.	105
SOR-35	Patch Cord E2K-LC(20m) as per technical specifications of SOR-35 of Information to Bidder	Nos.	34
SOR-36	Patch Cord E2K-SCAPC(20m) as per technical specifications of SOR-36 of Information to Bidder	Nos.	8
SOR-37	SC pigtail as per technical specifications of SOR-37 of Information to Bidder	Nos.	100
SOR-38	Attenuators LC to LC (10db) as per technical specifications of SOR-38 of Information to Bidder	Nos.	25
SOR-39	Attenuators LC to LC (05db) as per technical specifications of SOR-39 of Information to Bidder	Nos.	80
SOR-40	Attenuators LC to LC (2db) as per technical specifications of SOR-40 of Information to Bidder	Nos.	30
SOR-41	Attenuators SC to SC(10 db) as per technical specifications of SOR-41 of Information to Bidder	Nos.	25
SOR-42	FMS SC/APC(12 Port) as per technical specifications of SOR-42 of Information to Bidder	Nos.	14
SOR-43	FMS SC/APC(24 Port) as per technical specifications of SOR-43 of Information to Bidder	Nos.	55
SOR-44	FMS SC/APC(48 Port) as per technical specifications of SOR-44 of Information to Bidder	Nos.	109
SOR-45	FMS LC/APC(24 Port) as per technical specifications of SOR-45 of Information to Bidder	Nos.	83
SOR-46	FMS LC/APC(48 Port) as per technical specifications of SOR-46 of Information to Bidder	Nos.	6
SOR-47	FMS E2k/APC(24 Port) as per technical specifications of SOR-47 of Information to Bidder	Nos.	29
SOR-48	FMS E2k/APC(48 Port) as per technical specifications of SOR-48 of Information to Bidder	Nos.	18
SOR-49	FMS FC/APC(24 Port) as per technical specifications of SOR-49 of Information to Bidder	Nos.	8

Note: Evaluation Method: Total Value Wise Evaluation.

Technical Specification of SOR Items

SOR1: Optical Fiber Splicing Machine

Sl No	Technical Specifications/Parameters	Required Value
	Alignment Method	Core to Core alignment
	Fiber cores	Single fiber
	Applied Fiber Category	SM/MM/DS/NZDS
	Diameter of Fiber	Cladding diameter (80-150 μ m), Coating diameter (100 to 1000 μ m)
	Cleave length	5 mm to 16 mm
	Splice program	Max 100
	Heating program	Max 30
	Typical Splice loss	0.02db(SM),0.01db(MM),0.04db(DS) & 0.04db (NZDS)
	Return Loss	≥ 60 db
	Loss Estimation	Provided
	Splice Time/Heating Time	Not more than 7 Second/25 Second
	Applicable protection sleeve	40 mm and 60mm
	Storage	10000 records
	Tension Strength	2N
	Camera	Two CMOS Camera
	Electrode life	≥ 5000 ARCS
	Display Size	Min 4.5 inch Color touchscreen LCD display
	Battery	Min 6000 mAh Li-ion rechargeable battery
	Fiber view & Magnification	Min 300 Times Max
	Connectivity interface	High speed USB
	Operating Environments	Altitude 0-5000m, Humidity 0-95%, Temperature -10 to +50 degree Celsius

SOR 2: Optical Time Domain Reflectometer (OTDR)

Sl No	Technical Specifications/Parameters	Required Value
1	Type of Fiber to be tested	Single Mode
2	Wavelength (nm)	1310/1550 ± 20 nm
3	Display	≥ 5 inch color LCD, Touch screen
4	Dynamic Range (dB)	Min 40 db
5	Event Dead Zone (EDZ)	1.0 m
6	Attenuation Dead Zone (ADZ)	≤ 2.5 m
7	Distance Range	User settable 0.1 to ≤ 250 km
8	Pulse Width	5ns - 20 μ s
9	Distance Accuracy	$\pm (1.0 + 0.005\% * \text{Testing Distance} + \text{Resolution})$

10	Loss Resolution	0.001
11	Loss Threshold (dB)	0.01
12	Min. Distance Resolution	0.1m
13	Sampling Points	256000
14	Measurement Time	Yes
15	Averaging Time Update	≤180s
16	Software Output	.sor, pdf
18	Built-in Optical Laser Source (OLS)	Yes
18.a	Optical Laser Source Wavelength	Operating wavelengths will be same as OTDR Wavelength
18.b	OLS Power	≥ -6dBm
19	Built-in Optical Power Meter (OPM)	Yes
20	Data Storage	≥ 9000 traces
21	Output Port/Interface	Min 2 x USB 2.0 Port
22	Size (H*W*D) (mm)	Bidder to be mention
23	Weight (kg)	Bidder to be mention.
24	Operating Temp/ RH	Operating : Min -20 to +50°C Storage: Min -20 to +60°C RH : ≥90%
25	Power Supply	Rechargeable lithium-ion batteries
26	Certification	CE
27	Standard Accessories	(i)Carrying Bag (ii) AC/DC Adapter (iii)Rechargeable lithium-ion battery (iv)User Manual (v) Calibration Certificate
28	Connector Port	FC/PC or SC/PC

Note: Along with the above mention specification following should also be there in features :

- 1 It should measure single mode optical fiber (G652.D) 9/125micrometer
- 2 It should measure attenuation, length of the fiber, splice loss, connector loss
- 3 It should support Adjustable pulse width, Adjustable detection time
- 4 OTDR report data store and transfer feature

SOR 3: Cable Locator

Sl No	Technical Specifications/Parameters	Required Value
Receiver		
1	Display	Graphic/LCD display, Backlit
2	Audio	Equipment should have volume control including in various steps including zero
3	Internal Antennas	Minimum 3 antennas

4	Locating modes	Locating mode- peak, null & differential peak with directional arrow.
5	Operating Modes	Receiver should have Passive mode (i) Power Frequency mode (ii) RF/Radio Frequency mode (iii) Cathodic protection Frequency mode
6	Frequencies	Minimum 2 Active Frequencies 8 kHz & 82 kHz (mandatory)
7	Guidance	Instrument should have left right arrow function
8	Receiver Display information	Backlit LCD display should provide following information: Locating Mode Indication, Left/Right Arrows or line orientation (compass), depth measurement, Antennae operating mode, Continuous Battery Check, Operating frequency, volume
9	Current Measurement	Receiver should also have current measurement function. There should be option to view the current measurement during route tracing process
11	Gain control	Semi Auto Gain Adjustment
12	Depth range measurement capability in transmitter mode	Up to 9 Meter
13	Depth range in Passive modes, Power (50 & 60Hz) / RF mode	Up to 9 Meter
15	Depth measurement in passive power & RF mode (without use of transmitter)	feature should be available
16	Operating Temperature Range	Operating -20°C to 50°C
17	Environmental rating	Weatherproof and complying to IP54
18	Weight of receiver (with battery)	Bidder to be mention
19	Battery	8 AA size dry battery with 40 Hrs of normal operation
Transmitter		
20	Output power	Min 10 Watt
22	Frequencies available	Minimum 2 Active Frequencies 8 kHz & 82 kHz (mandatory)
23	Load Matching	Automatic adjustment of output voltage to maximize signal
24	Display type	Graphical/LCD with backlit
25	Multimeter function	Transmitter should have capability to measure and display load, current and voltage to assess earthing condition
26	Internal Battery	alkaline rechargeable Battery pack with capability of continuous usage 45 hrs.
27	Modes of operation	Direct Connection Mode & Induction mode
28	Controls	Push buttons for Frequency, Output Level and Information
29	Weight	Bidder to be mention

30	Temperature Range	Operating (-20°C to 50°C)
31	Construction & Environmental rating	High Impact ABS. Weather proof and complying to the international standard
32	Standard Accessories	Locating kit (comprising transmitter and receiver) should be provided with accessories like soft carry bag, Instruction manual, Direct connection lead and Ground Rod

SOR 4: Optical Laser Light Source

Sl No	Technical Specifications/Parameters	Required Value
S.No	Parameter	Specification
1	Source type	Laser
2	Fiber type	Single mode
3	Optical interface type	SC or FC
4	Central Wavelength	1310 ± 20nm & 1550 ± 20nm
5	Spectral Width	≤ 5nm
6	Powe Stability	± 0.1 dB
7	Output power	≥ -7dBm
9	Battery	AA/AAA type (At least 10 Hours Backup)
11	Carry case	required

SOR-5: Optical Power Meter

Sl No	Technical Specifications/Parameters	Required Value
Sr. No.	Parameters	Specification
1	Wavelength Range (nm)	830 nm to 1650 nm
2	Wavelength calibrated (nm)	850-1650 nm
3	Measurement Range	Min +10 to -65dBm
4	Protection against high optical power	Min for defined range
5	Calibration	Auto-self check when unit is turned ON
6	Resolution	0.01 dB
7	Accuracy	±5%
8	Sensor Type	To be defined by the manufacturer
9	Display	High Visibilty Graphical display with backlight(four or more digits (excluding '±' sign)
10	Display parameter	Optical Power in dBm, dB, measured wavelength, low battery, etc

11	Display units	dB, dBm, Watt
12	Connector Type	universal 2.5 mm connector
13	Auto Power off	Should be Available
14	Power Supply	Rechargeable Battery with charger
15	Power back up	At least 10 hours for Continuous use
16	Interface & Report Generation	USB Type C
17	Storage	Should have storage of at least 1000 results
18	Size and Weight	Handheld, light weight ,compact and rugged
19	Operating Temperature	-10 °C to 50 °C

SOR-6: Optical Tool Kit

The Optical tool kit should have the following:

1.General Purpose Tools

(I)Ratchet Screw Driver (II) Measuring Scale (III) Hack Saw (junior) with blades Section (IV) Scissor Section (V) Tweezer (VI) Cutting Nipper (VII) Snip Nose Plier (VIII) Hammer (IX) Adjustable Spanner.

2.General purpose tools for optical fibre cables

(I)Cable Knife (II) Cable Cutter (III) Cable sheath & Jacket Remover (IV) Scissor Ceramic (V) FRP Cutter (VI) Loose Tube Cutter (VII) Stripper Cutter .

3.Tools for Optical Fibre

(I) Fibre Stripper (Primary Coating) (II) Fibre Stripper (Secondary Coating) (III) Fibre Cleaver

4. Consumable Items

i. Emery Cloth or Emery Paper (zero grade) ii. PVC adhesive tape (5m length of 10 mm width). iii. ISO propane (Lab. Grade, 250 ml, for general cleaning) iv. Hexane (Lab. Grade, 250 ml, for cleaning the jelly) v. Ethyl alcohol (Lab. Grade 250 ml, for cleaning the fibre) vi. Tissue / Lens Paper - One Packet vii. Cotton Buds (small size)- One Packet viii. Torch with cell (Pencil Type)- One

5. Tool Box

SOR-7 : Joint Enclosure-24 Fiber

SOR-8 : Joint Enclosure -12 Fiber,Box Type

The Joint Enclosure for SOR-7 to SOR-8 should be confirming to TEC no. TEC/GR/TX/OJC-002/03/APR-2010 or latest with all amendments.TEC Specification Document to be submitted by OEM/OEM authorized Seller:

A. For OEM Bidders: Along the Bid, OEM should submit valid "Technical Specification Evaluation Certificate" for Specification no.TEC/GR/TX/OJC-002/03/ APR-2010 or latest amendments if any issued by Competent/Authorized Government Organization i.e. BSNL in favor of OEM.

B. For OEM authorized Seller bidders: Along the Bid, OEM authorized Seller should submit valid "Technical Specification Evaluation Certificate" for Specification no. TEC/GR/TX/OJC-

002/03/ APR-2010 or latest amendments if any issued by Competent/Authorized Government Organization i.e. BSNL in favor of OEM who provides Manufacturer Authorization Form (MAF) as per annexure-IV of ATC to Seller.

Bids without "Technical Specification Evaluation Certificate" as mentioned above will be rejected summarily.

SOR 9: Patch cord LC - LC (1m)

SOR 10: Patch Cord SC - SC (1m)

SOR 11: Patch Cord LC - LC (3m)

SOR 12: Patch Cord LC - LC (5m)

SOR 13: Patch Cord SC - SC(3m)

SOR 14: Patch Cord SC - SC(5 m)

SOR 15: Patch Cord SC - SC(10 m)

SOR 16: Patch Cord SC - FC(5 m)

SOR 17: Patch Cord LC-FC(3m)

SOR 18: Patch Cord E2K-LC (3m)

SOR 19: Patch Cord E2K-LC (5m)

SOR 20: Patch Cord E2K-SCAPC(5m)

SOR 21: Patch Cord E2K-LC(10m)

SOR 22: Patch Cord LC-FC(10m)

SOR 23: Patch Cord LC-LC(10m)

SOR 24: Patch Cord LC-SC(5m)

SOR 25: Patch Cord LC-SC(10m)

SOR 26: Patch Cord LC-SC(15m)

SOR 27: Patch Cord E2K-LC(15m)

SOR 28: Patch Cord LC-FC(15m)

SOR 29: Patch Cord E2K-FC(15m)

SOR 30: Patch Cord FC-FC(15m)

SOR 31: Patch Cord SC-FC(15m)

SOR 32: Patch Cord E2K - SC(15m)

SOR 33: Patch Cord LC - LC (15 m)

SOR 34: Patch Cord LC - LC (20m)

SOR 35: Patch Cord E2K-LC(20m)

SOR 36: Patch Cord E2K-SCAPC(20m)

SOR 37:SC pigtail

The Patch cords for SOR-9 to SOR-37 should be confirming to TEC NO.: TEC/GR/TX OFJ-01/05/NOV-09 with latest amendment No. TEC/T/OFC-OFJ/155/2013. However, the Patch cords should have the following:

- i) Operating Temperature: -40°C to +85°C.
- ii) Insertion Loss:
 - a) Insertion Loss of complete patch cord including adapter when tested from each direction in all conditions of operations: ≤ 0.3 dB.
 - b) Insertion Loss of Adaptors: ≤ 0.1 dB
- iii) Return Loss for each connector of patch cord:
 - a) Type-I FC-PC : ≥ 50 dB
 - b) Type-II SC-PC : ≥ 50 dB
 - c) Type-III SC-APC : ≥ 65 dB
 - d) Type-IV LC : ≥ 50 dB
 - e) E2K/APC : ≥ 60 dB
- iv) The length and type of connector of each Patch Cord: As per SOR.
- V) The connectors must be made of reputed OEMs 3M, Huber-Shuner, R&M, TE Connectivity/Raychem. any other CACT approved Manufacturer/s having a valid approval against specification number TEC/GR/TX/OFJ-01-NOV.09 for the tendered connected type.
- vi) Connector Body:
 - a) FC-PC : Ni plated brass body (Ni plating shall be as per BIS Standards)
 - b) SC-PC & SC-APC : Engineering thermoplastic (Glass filled PBT: Polybutylene Terephthalate)
 - c) LC : PEI (Polyetherimide)/ PPS (Polyphenylene Sulphide)
- vii) Color of connector body:
 - a) FC-PC connector: Ni plated Brass
 - b) SC-PC connector: Blue
 - c) SC-APC connector: Green
 - d) LC connector: Blue
- viii) Radius of curvature:
 - a) FC-PC : 10 to 25 mm
 - b) SC-PC : 10 to 25 mm
 - c) SC-APC : 5 to 12 mm

- d) LC : 10 to 25 mm
- ix) Minimum bending radius of the cable:
 - a) Loaded : 50 mm
 - b) Unloaded : 30 mm

SOR 38: Attenuators LC-LC-10 db

SOR 39: Attenuators LC-LC-5 db

SOR 40: Attenuators LC-LC-2 db

SOR 41: Attenuators SC-SC-10db

The Attenuators for SOR-38 to SOR-41 should be confirming to TEC NO.: TEC/GR/TX/OPA-003/03/OCT-14 (Type-B) or latest with all amendments. However, the Attenuator should have the following:

- (i) Fibre type : Conforming to Section - I of TEC GR No. TEC/GR/TX/ORM 01/05/NOV-09
- (ii) Wave length range : 1100 nm to 1650nm
- (iii) Calibration wavelength : 1310nm, 1490nm & 1550nm (Note: The attenuator shall be calibrated at 1310nm, 1490nm and 1550nm wavelengths)
- (iv) Attenuation : i) 5 dB ii) 10 dB iii) 15 dB iv) 20 dB
- (v) Attenuation Deviation Accuracy : ± 0.5 dB for 5 dB & 10 dB attenuation at 1310nm, 1490nm & 1550 nm ± 1.0 dB for 15 dB & 20 dB attenuation wavelength
- (vi) Return loss : > 45 dB
- (vii) Switching repeatability : ± 0.2 dB
- (viii) Maximum allowable Input level : $> + 3$ dBm
- (ix) Connectors : Universal connector adapter suitable for FC-PC, SC-PC & LC type of connector (suitable for 1.25 mm and 2.5 mm ferrule) or as per order
- (x) Display of the value : The attenuation values at all the wavelengths (1310 nm, 1490nm & 1550 nm) shall be indicated by the manufacturer on the body of the attenuator

SOR 42: FMS SC/APC-12 Port

SOR 43: FMS SC/APC-24 Port

SOR 44: FMS SC/APC-48 Port

SOR 45: FMS LC/APC-24 Port

SOR 46: FMS LC/APC-48 Port

SOR 47: FMS E2k/APC-24 Port

SOR 48:FMS E2k/APC(48 Port)

SOR 49:FMS FC/APC(24 Port)

The FMS for SOR-42 to SOR-49 should be confirming to TEC NO.: GR No. GR/FDM-01/02.APR 2007 or latest with all amendments. However, the FMS should have the following:

TECHNICAL REQUIREMENTS FOR FDMS AT BUILDING PREMISES (TYPE - III A & Type III - B):

FDMS at building premises shall provide environmental and mechanical protection for the fibre management system that includes the functions of splicing and passive component integration. The product shall facilitate any required configuration by adding splicing, passive device and/or connector patching subassemblies. This unit shall be mounted on a wall inside the building/customer's premises with proper nuts and bolts above ground applications. The product shall have provision for cable termination and sealing requirements. The cover shall be provided which can be easily opened without disturbing the cables, fibres and pigtails/patch cords. The system shall be provided along with locking system. The FDMS at Building Premises shall be of following two types :

- a) Type III-A (For 24 nos. of fibres)
- b) Type III-B (For 48 nos. of fibres)

5.1 Out side dimensions :

Type III-A	Type III-B
a) Width $375 \pm 2\%$ mm	$375 \pm 2\%$ mm
b) Height $450 \pm 2\%$ mm	$600 \pm 2\%$ mm
c) Depth $175 \pm 2\%$ mm	$175 \pm 2\%$ mm

5.2 Capacity : It shall have the capacity to accommodate the following :

- | Type III-A | Type III-B | |
|------------------------------------|------------|----|
| a) No. of cables : 2 | 4 | |
| b) No. of fibres : 24 | 48 | |
| c) No. of fibres/cable : 12 | 12 | |
| d) No. of connectors/pigtails : 24 | 48 | |
| e) No. of Splicing trays : | | |
| i) For Ribbon splicing 2 | | 4 |
| ii) For Single circuit splicing 12 | | 24 |
| f) Splicing capacity of the tray : | | |
| i) 1 Ribbon per tray | | |
| ii) 2 Fibre per SC tray | | |

5.3 Cable entry and exit ports :

5.3.1 The Type III-A box shall have the following entry and exit ports :

Number of Ports Usage Cable range in mm

- a) 1 Pigtail & / or Patch cord 3 mm dia, Max. 24 pc
- b) 2 Drop cable 8 – 25

5.3.2 The Type III-B box shall have the following entry and exit ports :

Number of Ports Usage Cable range in mm

- a) 2 Pigtail & / or Patch cord 3 mm dia, Max. 48 pc
- b) 4 Drop cable 8 – 25

Note : The out door cable entry ports shall be on the bottom of the both types of

boxes.

5.3.3 Sealing Arrangement : Suitable sealing arrangement of the entry and exit ports shall be provided and these shall be opened as and when required.

5.4 Type of connector Adopter : FC-PC/SC-PC/LC-PC

(mounted on suitable panel)

Note: The Pig Tails, Patch cords and connector adopter shall meet the requirement of TEC GR No. GR/OFJ-01/04. APR 04 /GR/OFJ-02/01

MAY 04 and subsequent amendment issued, if any. For ribbon fibre, the ruggedised secondary coated pigtails used shall be with fan out arrangements. The manufacturer shall indicate the diameter of the pigtails supplied with the system.

5.5 Fibre Arrangement System (FAS):

5.5.1 The sub - assembly shall be installed on a common plate i.e. Fibre Arrangement System. The design feature shall ensure a snap fit mounting and shall ensure that the fibre are routed positively to the selected tray.

5.5.2 Fibre Arrangement System (FAS), the element of the system, shall ensure the fibre management and identification while routing the fibres from the cable to organizer trays. The fibre shall pass through designated path (Grooves) directly leading to the nominated place . The fibre shall not be bare throughout its path. FAS plates shall be pre-installed to accommodate subassemblies. Fibre Distribution Management System (Type-I, Type-II & Type-III) (GR No.GR/FDM-01/02 APR 2007)

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5.5.3 Pre-installed transportation tubing to guide and protect the fibre from the cable to the FAS plate shall be provided.

5.5.4 Pre - installed fibre break - out (a proper arrangement for fanning out of the installed fibers in the FAS and for fanning out of ribbon fibre to connectorised pigtails) shall be provided.

5.5.5 A mounting bracket for Aramid Yarn termination units (ATU) next to the FAS plate to provide strain relief for pigtails as needed shall be provided.

5.5.6 Pig tail trumpets or bend control arrangement for guiding pigtails as they exit, shall be provided.

5.5.7 Mounting screws and nuts shall be provided.

5.6 Tray layout for Individual fibre:

5.6.1 Fibre arrangement System (FAS) shall be fully loaded with single circuit trays to accommodate maximum 24 fibres for Type III-A and maximum 48 fibres for Type III-B.

5.6.2 The FAS shall be used to splice pigtails/ ruggedised fibre with the external cable.

The unit shall have following special functions and features:

- a) Single circuit management i.e. splice & storage of individual circuit (2) fibres.
- b) Device management (Splitters, WDMs)
- c) Inter connection
- d) Cross connection
- e) Total fibre management
- f) Modularity
- g) Commonality
- h) Ease of installation
- i) High reliability

- j) Snap fit arrangement
- k) There shall be bend controls both on the trays and chassis to guide and protect the pigtails.
- l) Pigtail retention facility.
- m) A tray wedge shall be provided in each shelf to enable working on the lower tray and ease of working.

5.7 Tray Layout for Ribbon Fibre :

5.7.1 Fibre arrangement System (FAS) shall be fully loaded with single element trays to accommodate maximum 24 fibres of ribbon cable for Type III-A and maximum 48 fibres of ribbon cable for Type III-B.

5.7.2 The FAS shall be used to splice ruggedised pigtails with the external cable. The unit shall have following special functions and features:

Fibre Distribution Management System (Type-I, Type-II & Type-III) (GR No.GR/FDM-01/02 APR 2007)

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- a) Ribbon Management i.e. splice & storage of 12 fibre ribbon with fan out arrangement
- b) Device management (Splitters, WDMs)
- c) Inter connection
- d) Cross connection
- e) Total fibre management
- f) Modularity
- g) Commonality
- h) Ease of installation
- i) High reliability
- j) Snap fit arrangement
- k) A tray wedge shall be provided in each shelf to enable working on the lower tray and ease of working.

5.8 Splice Holder for Individual fibre :

The single fibre (non-ribbon) splice holder shall be able to hold heat - shrinkable splice protectors. The manufacturer shall give the details of the protection sleeves to be used for the protection of the splice. The heat shrinkable splice protection sleeves shall be as per the TEC GR No. GR/PTS-01/02. APR 2006. If the manufacturer uses any other type of splice protection sleeves the same shall be supplied with the system along with 25 % spares.

5.9 Splice Holder for Ribbon fibre :

The 12 fibre ribbon splice holder shall be able to hold heat - shrinkable splice protectors. The manufacturer shall give the details of the protection sleeves to be used for the protection of the splice. The heat shrinkable splice protection sleeves shall be as per the TEC GR no. GR/PTS-02/01. JAN 2001. If the manufacturer uses any other type of splice protection sleeves the same shall be supplied with the system along with 25 % spares.

5.10 Transport Tubes :

Transport tubes shall be provided to guide the fibres (ribbon and non-ribbon) from terminations point of the cable to the entry port of the FAS. The transport tube shall be made of polyolefin / silicon and shall be non-kinking type. The material of the transport tube shall not affect the primary coated fibres, encapsulated fibre ribbons and other parts of the cable. Diameter of transport tube shall match the dimensions of the funnel and it shall be able to accommodate the fibres. The main transport tube shall be able to accommodate

loose tubes (min). Suitable arrangement shall be provided to convert the OF cable into loose tubes for transporting into different FAS and cassette assemblies. The transport tube / flexible tube and the funnel arrangement shall be provided for the full capacity of the system.

Note1: The manufacturer shall test the material and provide the test results. A certificate of recognized testing laboratory may be accepted if in house test facilities are not available with the manufacturer.

Note2: Suitable arrangement for the fibres of different cable construction designs shall be provided for transporting it to cassette assemblies.

Note3: The transport tube shall be examined physically for its non kinking behavior.

5.11 Cable and Strength member termination Arrangement :

5.11.1 A complete arrangement to hold & terminate the cables and strength member(s) shall be provided.

5.11.2 Velcro tape or roll (5 meter X 25 mm) shall be provided to secure the pigtails and cassette assembly.

5.12 Fibre Organizer Tray :

These blocks shall be used to organize fibres, splices etc and shall have following basic features:

- a) Pre- assembled and pre-tested.
- b) Click-on Sub assemblies (snap fit).
- c) Controlled organizer hinging.
- d) Spliced or connectorised patching capability

5.12.1 Type of organizer Tray :

- a) Single Circuit organizer tray
- b) Ribbon fibre organizer tray

Note : These shall be offered for testing and supplied, if ordered.

5.12.1.1 Single Circuit organizer Tray :

The single circuit organizer tray shall be to accommodate 2 fibres. This module of hinging trays shall store fibres and splices on single circuit basis . It shall provide network flexibility point for the expansion and reconfiguration of the network. The organizer shall not cause the transient losses while fibre is handled and shall reduce the transmission errors. It shall possible to store 900 mm to 1500 mm of fibres and pigtails in each tray maintaining a minimum bend radius of 35 mm. It shall have following features :

- a) Fibre Organizer shall be non-metallic made of ABS material and shall conform to the requirements as specified in annexure-III and the upper tray shall have a suitable cover of ABS Material.
- b) Splice Tray shall allow for coiling of fibres with primary (0.250mm) and secondary (0.9 mm) coating.
- c) It shall be possible to accommodate the following type of splice in each tray :
 - i) Splicing of primary-coated fibres (0.250 mm)
 - ii) Splicing of secondary - coated fibres (0.9 mm) to primary-coated fibres (0.250 mm)
 - iii) Splicing of secondary-coated fibres (0.9 mm) to secondarycoated fibres (0.9 mm)
- d) Slots of the splice tray shall be able to fix the splice protection sleeves in such a way that they will not shift or move inside the splice tray or come

into conflict with the fibre coils once fixed in a slot of the tray. The slots shall not cause any stress or strain neither on splice protection shelves nor on the optical fibres.

e) The fastening arrangements for entry of the fibres into the splice tray shall be suited to secondary coated fibres and primary coated fibres in tubes, without there being any risk of bending loss or damage to the fibres or the secondary tubes.

f) It shall be possible to take any individual fibres out of the splice tray for repair during normal operation, without damaging the remaining fibres.

g) The connectorised Pigtails shall be pre-installed in the system.

h) The suitable bend controls shall be provided to ensure proper guiding of pig tails and patch cords.

i) It shall be possible to arrange a splice of a ribbon type of cable having 12 fibre per ribbon. The manufacturer shall supply the suitable trays, if required. The details of the fibre ribbon management and the splicing of the such ribbons along with the accessories and spares shall also be submitted.

5.12.1.2 Ribbon fibre organizer Tray:

The manufacturer shall offer two types of splicing trays :

i) To splice 12 fiber ribbon to 12 fiber of ribbon type of optical fibre cables.

ii) To splice 12 fiber ribbon to 12 individual fibers of optical fiber cables.

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The module shall be of hinging type and shall store fibres and splices on single element basis (for individual fibre, the splicing and storage shall be on single element basis or 12 fibre whichever is lower). The hinges shall be provided on length side of the organiser. It shall provide network flexibility point for the expansion and reconfiguration of the network.

The organizer shall not cause the transient losses while fibre ribbon is handled in other organiser. It shall possible to store minimum 1500 mm of ribbonised fibres and pigtails in each tray maintaining a minimum bend radius of 35 mm . It shall have following features :

a) Fibre Organizer shall be non-metallic made of ABS material and shall confirm to the requirements as specified in annexure-III and the upper tray shall have a suitable cover of ABS Material.

b) Splice Tray shall allow for coiling the encapsulated ribbon fibres and the ruggedised fibres with fan out arrangement.

c) It shall also be possible to accommodate the following type of splices in each tray :

i) 2 Splices of 12 fibre ribbon

ii) Splices for 12 individual fibre to 12 fibre ribbon with fan out unit. (This shall be offered for testing but supplied, if ordered)

d) It shall also be possible to accommodate the splice of primarycoated encapsulated ribbonised fibres.

e) Slots on the splice tray shall be able to fix the splice protection sleeves in such a way that they will not shift or move inside the splice tray or come into conflict with the fibre coils once fixed in a slot of

the tray. The slots shall not cause any stress or strain neither on splice protection sleeves nor on the optical fibres.

f) The fastening arrangements for entry of the fibres into the splice tray shall be suited to ribbonised primary coated fibres in tubes, without there being any risk of bending loss or damage to the fibres or the secondary tubes.

g) The connectorised Pigtails shall be pre-installed in the system.

h) The suitable bend controls shall be provided to ensure proper guiding of pig tails and patch cords.

5.13 Patch Panel :

5.13.1 The patch panel shall be mechanical assembly which shall provide the facility and function of pigtails/patch cords patching and making connections. The patch panel shall have the capacity to meet maximum 48 Nos. of FC-PC/SCPC/LC-PC type of connectors adaptors and these shall be pre-mounted and installed.

Note :- The Pigtails, Patch cords and FC-PC/SC-PC/LC-PC type of Optical Connector adaptors shall meet the requirement of TEC GR No. GR/OFJ-01/04. APR 04/GR/OFJ-02/01 MAY 04 and the subsequent amendment issued, if any. The pigtails from the FAS to the patch panel up to the FAS and the organizer shall be pre-arranged and pre-installed. The manufacturer shall indicate the diameter of the pigtails supplied.

5.13.2 Features of Patch Panel :

a) It shall be accessible from front side for easy handling.

b) It shall have the facility to store extra length of pigtails and patch cords.

C) It shall accommodate patch shelf trays hinge clipped.

d) The connector adaptors shall be pre-installed in the patch panel shelf trays.

e) Pigtail/ Patch cord storage drums and duct shall be provided to store extra length of pigtails/patch cords. A pigtail of minimum 2m in length from FAS to PPS (Patch Panel Shelf) shall be provided.

5.14 Spares and Accessories :

The manufacturer shall supply the sufficient required accessories and spares for the installation of the system.

OFFER LETTER

Annexure-II

DGM/O&M,
Northern Region, RailTel
6th Floor, 3rd Block,
Delhi Technology Park,
Shastri Park, New Delhi,
Delhi-110053

Ref: - Tender No.....Dated: xx.xx.2023

It is hereby confirmed that we have understood the terms and conditions of the Tender, have thoroughly examined the specifications, are aware of the nature of the goods & services required and our offer is to supply goods & services strictly in accordance with the requirements, terms & conditions of this Tender. We agree to abide by the terms and conditions of the tender if the contract is awarded to us.

2) We hereby offer to supply the goods and services detailed above or such portions thereof as you specify in the purchase order at the price quoted and agree to hold this offer open for acceptance for a period of 65 days from the date of opening of the bid.

3) Online payment vide transaction No. _____ dated _____ for Rs. _____ Lacs in favor of RailTel Corporation of India Ltd, towards EMD has been paid through the details as mentioned in tender notice/ tender document. The full value of Earnest Money shall stand forfeited without prejudice to any other rights or remedies if, I/We withdraw or modify the offer within validity period or do not deposit the security deposit (Performance Bank Guarantee) within **30 days** after issue of Purchase Order.

SIGNATURE OF SUPPLIER (S)

Date:

CONTRACTOR (S) ADDRESS

SIGNATURE OF WITNESS:

- 1.
- 2.

Annexure-III

PROFORMA FOR PERFORMANCE BANK GUARANTEE
PERFORMANCE BANK GUARANTEE BOND
(On Stamp Paper of Rs one hundred)
(To be used by approved Scheduled Banks)

1. In consideration of the RailTel Corporation of India Limited., Plate-A, 6th Floor, Office Tower-2, NBCC Building, East Kidwai Nagar, New Delhi-110023 (Herein after called RailTel) having agreed to exempt(Hereinafter called “the said Contractor(s)”) from the demand, under the terms and conditions of an Agreement No.....dated.....made between.....and..... for (hereinafter called “ the said Agreement”) of security deposit for the due fulfillment by the said Contractor (s) of the terms and conditions contained in the said Agreement, on production of a Bank Guarantee for Rs.(Rs only). We (indicate the name of the Bank) hereinafter referred to as “the Bank”) at the request of Contractor(s) do hereby undertake to pay the RailTel an amount not exceeding Rs. against any loss or damage caused to or suffered or would be caused to or suffered by the RailTel by reason of any breach by the said Contractor(s) of any of the terms or conditions contained in the said Agreement.
2. We , Bank and our local branch at New Delhi (indicate detail address of local New Delhi branch with code no.) do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on demand from the RailTel stating that the amount is claimed is due by way of loss or damage caused to or would be caused to or suffered by the RailTel by reason of breach by the said Contractor(s) of any of terms or conditions contained in the said Agreement or by reason of the Contractor(s) failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs
3. We, bank undertake to pay to the RailTel any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) / Tenderer(s) in any suit or proceedings pending before any court or Tribunal relating thereto our liability under this present being, absolute and unequivocal. The payment so made by us under this Bond shall be a valid discharge of our liability for payment there under and the Contractor(s) / Tenderer(s) shall have no claim against us for making such payment.

4. We, Bank further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the RailTel under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till RailTel certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this Guarantee. Unless a demand or claim under the Guarantee is made on us in writing on or before the We shall be discharged from all liability under this Guarantee thereafter.
5. We,..... (indicate the name of Bank) further agree with the RailTel that the RailTel shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the Agreement or to extend time of to postpone for any time or from time to time any of the powers exercisable by the RailTel against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension to the said Contractor(s) or for any forbearance, act or omission on the part of RailTel or any indulgence by the RailTel to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have affect of so relieving us.

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

We, the Bank further agree that this guarantee shall be invokable at our place of business at/New Delhi (indicate detailed address of local New Delhi Branch with code no.). The branch at New delhi is being advised accordingly.

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

Dated the day of ,2023

for
(indicate the name of the Bank)

Witness:

1. Signature
 Name
2. Signature
 Name

Manufacturer Authorization form (MAF)

DGM/O&M
RailTel Corporation of India Ltd.
6th Floor, 3rd Block,
Delhi Technology Park, Shastri Park,
Delhi – 110053.

Date: _____

Subject: Manufacturer Authorization form (MAF) to M/s for

Ref: Tender No.....dated.....

Dear Sir,

We, M/s....., are established and reputed manufacturer and service provider of(Product details), having our registered office at

We hereby authorize M/s (bidder name), Office to participate in bid and subsequently upon award of the bid to execute the **“Supply of OTDR, Splicing Machine, Cable Locator, Laser Source, Power Meter, Tool Kit, Patch cord, Attenuators, FMS, Joint Enclosures & pigtails through GeM Bid”** of our range of products against your above said bid.

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

Thanking you,
Best regards,

Authorised Signatory

**FORMAT FOR CERTIFICATE TO BE UPLOADED BY TENDERER
ALONGWITH THE TENDER DOCUMENTS**

(To be executed in presence of Public notary on non-judicial stamp paper of the value of Rs.100/-. The stamp paper has to be in the name of the tenderer)**

I.....(Name and designation)** appointed as the attorney/authorized signatory of the tenderer (including its constituents),
M/s. _____ (hereinafter called the tenderer) for the purpose of the Tender documents for the work of

_____ as per the tender No. _____ of (-----Railway), do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

- (i) I/We the tenderer (s), am/are signing this document after carefully reading the contents.
- (ii) I/we the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
- (iii) I/We hereby declare that I/We have downloaded the tender documents from electronic-tender portal. I/We have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. In case of any discrepancy noticed at any stage i.e. evaluation of tenderers, execution of work or final payment of the contract, the master copy available with the railway Administration shall be final and binding upon me/us.
- (iv) I/We declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
- (v) **I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted alongwith the offer and same shall be binding upon me/us.**
- (vi) **I/We declare that the information and documents submitted alongwith the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents submitted by us.**
- (vii) I/We undersigned that if the certificates regarding eligibility criteria submitted by us are found to be forged/false or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender EMD besides banning of business for five year on entire IR. Further, I/we

(*insert name of the tenderer*)** _____ and all my/our constituents understand that my/our offer shall be summarily rejected.

- (viii) I/we also understand that if the certificates submitted by us are found to be false/forged or incorrect at any time after the award of the contract, it will lead to termination of the contract, alongwith forfeiture of EMD/SD and Performance Guarantee besides any other action provided in the contract including banning of business for five year on entire IR.

**DEPONENT
SEAL AND SIGNATURE
OF THE TENDERER**

VERIFICATION

I/We above named tenderer do hereby solemnly affirm and verify that the contents of my/our above certificate are true and correct. Nothing has been concealed and no part of it is false.

**DEPONENT
SEAL AND SIGNATURE
OF THE TENDERER**

Place:

Dated:

** The contents in Italics are only for guidance purpose. Details as appropriate, are to be filled in suitably by tenderer. Attestation before Magistrate/Notary Public.

GUIDLINES REGARDING PROVISION FOR PROCUREMENT FROM A BIDDER WHICH SHARES A LAND BORDER WITH INDIA

- I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority [The Competent Authority for the purpose of registration under this Order shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT)].
- II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from a country which shares a land border with India" for the purpose of this Order means: -
 - a. An entity incorporated, established or registered in such a country; or
 - b. A subsidiary of an entity incorporated, established or registered in such a country; or
 - c. An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - d. An entity whose beneficial owner is situated in such a country; or
 - e. An Indian (or other) agent of such an entity; or
 - f. A natural person who is a citizen of such a country; or
 - g. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.
- IV. The beneficial owner for the purpose of (III) above will be as under:
 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means. Explanation-
 - a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
 - b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
 3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

Certificate to be given by the Tenderer:

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that I am not from such a country or, if from such a country, I have been registered with the Competent Authority. I hereby certify that I fulfill all requirements in this regard and I am eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

Certificate to be given by Tenderer for Works involving possibility of sub-contracting:

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I certify that I am not from such a country or, if from such a country, I have been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby certify that I fulfill all requirements in this regard and I am eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

Annexure-VII

PROFORMA FOR “NIL DEVIATION COMPLIANCE UNDERTAKING
(To be signed by the Bidder)

To,

**DGM/O&M,
RailTel Corporation of India Limited
6th Floor, IIIrd Block,
Delhi Technology Park, Shastri Park,
New Delhi-110053**

Tender Reference No.:

Sub: NIL Deviation Compliance

Over and above all our earlier conformations and submissions as per your requirements of the tender, we confirm that,

1. All SOR item proposed in scope supplies are compliant to the technical specifications of the equipment as mentioned in the Annexure-I of ITB Document.
2. We will also ensure our unconditional compliance of all the terms and conditions as mentioned in the Tender document including all corrigenda.
3. List of deviations (Partial Compliance and Non-compliance) from terms and conditions as mentioned in the Tender document including all corrigenda, if any, is enclosed as Annexure with this form. We understand that any partial compliance or non-compliance, may result in **REJECTION** of our bid.

Seal and signature of the bidder

Place:

Date:

(This letter should be on the letterhead of the bidder duly signed by an authorized signatory)

Detailed standard conditions applicable for the Contract

1. Tenderers Address

Tenderer shall state in the tender his postal address fully and clearly .Any communication sent to the Tenderers by post at his said address shall be deemed to have reached the tenderer duly & timely, not withstanding the fact the communication could not reach the tenderer at all or in time for whatever reason .Important documents shall be sent by Registered post.

2. Law governing the contract.

The contract shall be governed by the law for the time being in force in the Republic of India. Compliance to regulations and bye-laws-The contractor shall conform to the provision of any statute relating to the works and regulations and bye-laws of any local authority and of any water and lighting companies or undertakings, with whose system the work is proposed to be connected and shall before making any variation from the drawings or the specifications that may be necessitated by so confirming give to the Engineer notice specifying the variation proposed to be made and the reason for making the variation and shall not carry out such variation until he has received instructions from the Engineer in respect thereof. The Contractor shall be bound to give all notices required by statute ,regulation or by e-laws as aforesaid and to pay all fees and taxes payable to any authority in respect thereof.

3. Force Majeure clause:-

If at any time ,during the continuity of this contract, the performance, in whole or part, by either party, of any obligation under this contract shall be prevented or delayed by reason of any war, hostility ,act of the public enemy, Civil Commotion ,Sabotage, Fires, Floods, Earth quakes, explosions, strikes, epidemics, quarantine restrictions, lockouts, any statute, statutory rules/regulation, order of requisitions issued by any Government Department of Competent Authority or acts of God (here-in-after referred to as event)then provided notice of the happening of any such event is given by either party to the other within twenty one 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 damage against the other in respect of such non- performance or delay in performance, and the obligations under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, Provided further that if the performance in whole or part of any obligation under this contract of prevented or delayed by reason of any such event beyond a periodas mutually agreed to by the RailTel and the Contractor after any event or 60 days in the absence of such an agreement whichever is more, either party may at its option to terminate the contract provided also that if the contrac t is so terminated under this clause the RailTel may at the time of such termination take over from the Contractor at prices as provided for in the contract, all works executed or works under execution.

4. Illegal Gratification:

Any bribe, commission, gift or advantage given, promised or offered by or on behalf to the contractor or his partner, agent or servant or anyone on his behalf to any officer or employees of the RailTel, or to any person on his behalf in relation to obtaining or the execution of this or any other contract with the RailTel shall, in addition or any criminal liability which he may incur, subject the contractor to the rescission of the contract and all other contracts with the RailTel and to the payment of any loss or damage resulting from such decision and the RailTel shall be entitled to deduct the amounts so payable from any moneys due to the Contractor (s) under this contract or any other contracts with the RailTel.

The contractor shall not lend or borrow from or have or enter into any monetary dealings or transactions either directly or indirectly with any employee of the RailTel and if he shall do so, the RailTel shall be entitled forthwith to rescind the contract and all other contracts with the RailTel. Any question or dispute as to the commission or any offence or compensation payable to the RailTel under this clause shall be settled by the Regional General Manager of RailTel, in such a manner as shall consider fit and sufficient and his decision shall be final and conclusive. In the event of rescission of the contract under this clause, the contractor will not be paid any compensation whatsoever except payment for the work done up to date of rescission.

5. LABOUR

Wages to Labour- The contractor shall be responsible to ensure compliance with the provisions of the Minimum Wages Act, 1948 (hereinafter referred to as the “said Act”) and the Rules made there-under in respect of any employees directly or through petty contractors or sub contractors employed by him on road construction or in building operations or in stone breaking or stone crushing for the purpose of carrying out this contract. If in compliance with the terms of the contract, the contractor supplied any labour to be used wholly or partly under the direct orders and control of the RailTel whether in connection with any work being executed by the contractor or otherwise for the purpose of the RailTel such labour shall, for the purpose of the clause, still be deemed to be persons employed by the contractor. If any moneys shall as a result of any claim or application made under the said Act be directed to be paid by the RailTel, such moneys shall be deemed to be moneys payable to the RailTel by the Contractor and on failure by the contractor to repay any moneys paid by it as aforesaid with seven days after the same shall have been demanded, the RailTel shall be entitled to recover the same from any moneys due or accruing to the contractor under this or any other contract with the RailTel.

6. Apprentices Act

The contractor shall be responsible to ensure compliance with the provisions of the Apprentices Act 1961 and the Rules and Orders issued there-under from time to time in respect of apprentices directly through petty contractors or sub-contractors employed by him for purpose of carrying out the contract. If the Contractor directly or through petty contractor or sub-contractors fails to do so, his failure will be breach of the contract and the RailTel may, in its discretion, rescind the contract. The Contractor shall also be liable for any pecuniary liability arising on account of any violation of the provisions of the Act.

7. Provisions of Payments of Wages Act

The Contractor shall comply with the provisions of the payment of Wages Act, 1936 and the rules made there under in respect of all employees directly or through petty contractors or sub-contractors employed by him in the works. If in compliance with the terms of the contract, the contractor directly or through petty contractors or sub-contractors shall supply any labour to be used wholly or partly under the direct orders and control of the Engineer whether in connection with the works to be executed hereunder or otherwise for the purpose of the Engineer such labour shall nevertheless be deemed to comprise persons employed by the contractor, and any moneys which may be ordered to be paid by the Engineers shall be deemed to be moneys payable by the Engineer on moneys due to the contractor in terms of the contract (whether under this contract or any other contract all moneys paid or payable by the RailTel by way of compensation of aforesaid or for costs of expenses in connection with any claim thereto and the decision of the Engineer upon any question arising out of the effect or force of this clause shall be final and binding upon the contractor.

8. Provision of Contract Labour(Regulation and Abolition) Act 1970

1.The contractor shall comply with the provision of the Contract Labour (Regulation and Abolition) Act 1970 and the Contract Labour (Regulation and Abolition) Act, Central Rules 1971 as modified from time to time, whenever applicable and shall also indemnify the RailTel from and against any claims under the aforesaid Act and the Rules.

2.The contractor shall obtain a valid license under the aforesaid Act as modified from time to time before the commencement of the work and continue to have a valid license until the completion of the work. Any failure to fulfil this requirement shall attract the penal provision of the Contract arising out of the resultant non-execution of the work.

3.The contractor shall pay to the labour employed by him directly or through sub-contractors the wages as per provisions of the aforesaid Act and the Rules wherever applicable. The Contractor shall notwithstanding the provisions of the contract to the contrary, cause to be paid the wages to labour indirectly engaged on the work including any engaged by his sub contractors in connection with the said work, as if the labour had been immediately employed by him.

4.In respect of all labour directly or indirectly employed in the work for performance of the contractor's part of the contract the contractor shall comply with or cause to be complied with the provisions of the aforesaid Act and the Rules wherever applicable.

5.In every case in which, by virtue of the provisions of the aforesaid Act or the Rules, the RailTel is obliged to pay any amount of wages to a workmen employed by the contractor or his sub-contractor in execution of the work or to incur any expenditure in providing welfare and health amenities required to be provided under the aforesaid Act and the Rules or to incur any expenditure in providing welfare and health amenities required to be provided under the aforesaid Act the Rules or to incur any expenditure on account of the contingent liability of the

RailTel due to contractor's failure to fulfil his statutory obligations under the aforesaid Act or the Rules the RailTel will recover from the contractor, the amount of wages so paid or the amount of expenditure so incurred, and without prejudice to the rights of the RailTel under section 20, sub section (2) and section 2 sub-section (4) of the aforesaid Act, the RailTel shall be at liberty to recover such amount or part thereof by deducting it from the security deposit and/or from any sum due by the RailTel to the contractor whether under the contract or otherwise. The RailTel shall not be bound to contest any claim made against it under sub section (1) of section 20 and sub section (4) of section 21 of the aforesaid Act except on the written request of the contractor and upon his giving to the RailTel full security for all costs for which the RailTel might become liable in contesting such claim. The decision of the RailTel regarding the amount actually recoverable from the contractor as stated above shall be final and binding on the contractor.

9. Reporting of Accidents to Labor

The contractor shall be responsible for the safety of all employees directly or through petty contractors or sub-contractors employed by him on the works and shall report serious accidents to any of them however and wherever occurring on the works to the Engineer or the Engineer's representative and shall make every arrangement to render all possible assistance.

10.Provisions of Workmen's Compensation Act

In every case, in which by virtue of the provision of section 12 sub section (1) of the Workmen's Compensation Act, 1923, RailTel is obliged to pay compensation to workman directly or through the petty contractor employed by the contractor or sub-contractor, in executing the work, RailTel will recover from the contractor the amount of the compensation so paid, and without prejudice to the right of RailTel under section 12 sub section (2) of the said Act. RailTel shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by RailTel to the Contractor whether under these conditions or otherwise, RailTel shall not be bound to contest any claim made against it under Section 12, Sub Section (1) of the said Act except on the written request of the contractor and upon his giving to RailTel full security for the all costs for which RailTel might become liable in consequence of contesting such claim.

11.Determination of Contract

Right of RailTel to determine the contract: The RailTel shall be entitled to determine and terminate the contract at any time, should in the RailTel's opinion, the cessation of the work becomes necessary owing to paucity of funds or from any other cause whatever, in which case the value of approved materials at site and of work done to date by the Contractor will be paid for in full at the rate specified in the contract. Notice in writing from the RailTel of such determination and the reasons thereof shall be conclusive evidence thereof.

Payment on determination of contract: Should the contract be determined under sub clause (1) of this clause and the Contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the

work, the RailTel shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfactions of the Engineer. The RailTel's decision on the necessity and property of such expenditure shall be final and conclusive.

The contractor shall have no claim to any payment of compensation of otherwise, however on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of determination of contract.

12.TERMINATION OF CONTRACT OWING TO DEFAULT OF CONTRACTOR:

The purchaser, without prejudice to any other remedy for breach of contract, such as removal from the list of registered supplier, by written notice of default sent to the supplier, the contract may be terminated in whole or in part:

- i) If the supplier fails to deliver any or all of the stores within the time period(s) specified in the contract, or any extension thereof granted; and
- ii) If the supplier fails to perform any other obligation under the contract within the period specified in the contract or any extension thereof granted.
- iii) If the tenderer, in either of the above circumstance(s) does not remedy his failure within a period of 30 days (or such longer period as the Purchaser may authorize in writing) after receipt of the default notice from the Purchaser.
- iv) If the contract is terminated in whole or in part, recourse may be taken to any one or more of the following actions:
 - a) Forfeiture of the performance security;
 - b) Upon such terms and in such manner as it deems appropriate, goods similar to those undelivered may be procured and the supplier shall be liable for all available actions against him in terms of the contract (popularly called risk purchase); and
 - c) However, the supplier shall continue to fulfil the contract to the extent not terminated.

13.RIGHT OF RAILTEL AFTER TERMINATION OF CONTRACT OWING TO DEFAULT OF CONTRACTOR:

- a) The contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any commitments or made any advances on account of or with a view to the execution of the works or the performance of the contract and contractor shall not be entitled to recover or be paid any sum for any works thereto not actually performed under the contract, unless or until the Engineer shall have certified the performance of such work and the value payable in respect thereof and the

Contractor shall only be entitled to be paid the value so certified.

b)The Engineer or Engineer's Representative shall be entitled to take possession of any materials, tools, implements, machinery or buildings on the works or on the property on which these are being or ought to have been executed, and to retain the employ the same in further execution of the works without the contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.

c)The Engineer shall, as soon as may be practicable after removal of the contractor fix and determine expert or by or after reference to the parties or after such investigation or enquiries as he may consider fit to make or institute and shall certify what amount (if any) has at the time of termination of the contract been reasonably earned by or would reasonably accrue to the Contractor in respect of the work then actually done by him under the contract what was the value of any unused or partially use materials, any constructional plants and any temporary works upon the site. The legitimate amount due to the contractor after making necessary deductions and certified by the Engineer should be released expeditiously..

14.SETTLEMENTOFDISPUTEANDARBITRATION:-

Any dispute or difference whatsoever arising between the parties out of relating to the construction, meaning, scope, operation or effect of this contract or the validity or the breach thereof shall be settled by a sole arbitrator in accordance with provisions contained in Arbitration and Conciliation Act, 1996 as amended and the award made in pursuance thereof shall be binding on the parties. The venue of such arbitration or proceedings thereof shall be New Delhi.

All arbitration proceedings shall be conducted in English. Resources against any Arbitral award so rendered may be entered into court having jurisdiction or application may be made to such court for the order of enforcement as the case may be.

The arbitral tribunal shall consist of the sole Arbitrator if the value of claim is upto Rs. 10 lakhs. The arbitrator will be appointed by the Managing Director of RailTel Corporation of India Ltd. If the value of claim or amount under dispute is more than Rs. 10 lakhs, the matter shall be referred to the adjudication of arbitral council. Managing Director/RailTel shall furnish a panel of three names to the contractor, out of which the contractor will recommend one name to be his nominee and then Managing Director/RailTel shall appoint out the panel, one name as RailTel's nominee and these two arbitrators with mutual consent appoint a third arbitrator who shall act as deciding. The award of sole arbitrator or Arbitral council, as the case may be, shall be final and binding on both the parties, i.e. contractor and RailTel Corporation of India Ltd.

Each of the parties agree that notwithstanding that the matter may be referred to

Arbitrator as provided therein, the parties shall nevertheless pending the resolution of the controversy or disagreement continue to fulfill their obligation under this agreement so far as they are reasonably able to do so.

Note: In case of conflict between the terms mentioned in ITB/ATC and GeM General Terms and Conditions, the terms mentioned in ITB shall prevail.

Annexure-IX**Technical Specification Compliance Sheet**

S.N	SOR Item	Specification Compliance(Yes/No)
1	SOR-1(Optical Fiber Splicing Machine)	
2	SOR-2(Optical Time Domain Reflectometer (OTDR))	
3	SOR-3 (Cable Locator)	
4	SOR-4(Optical Laser Light Source)	
5	SOR-5(Optical Power Meter)	
6	SOR-6(Optical Tool Kit)	
7	SOR-7(Joint Enclosure (24 Fiber))	
8	SOR-8(Box Type Joint Enclosure (12 Fiber))	
9	SOR-9(Patch cord LC - LC (1m))	
10	SOR-10(Patch Cord SC - SC (1m))	
11	SOR-11(Patch Cord LC - LC (3m))	
12	SOR-12(Patch Cord LC - LC (5m))	
13	SOR-13(Patch Cord SC - SC(3m))	
14	SOR-14(Patch Cord SC - SC(5 m))	
15	SOR-15(Patch Cord SC - SC(10 m))	
16	SOR-16(Patch Cord SC - FC(5 m))	
17	SOR-17(Patch Cord LC-FC(3m))	
18	SOR-18(Patch Cord E2K-LC (3m))	

19	SOR-19(Patch Cord E2K-LC (5m))	
20	SOR-20(Patch Cord E2K-SCAPC(5m))	
21	SOR-21(Patch Cord E2K-LC(10m))	
22	SOR-22(Patch Cord LC-FC(10m))	
23	SOR-23(Patch Cord LC-LC(10m))	
24	SOR-24(Patch Cord LC-SC(5m))	
25	SOR-25(Patch Cord LC-SC(10m))	
26	SOR-26(Patch Cord LC-SC(15m))	
27	SOR-27(Patch Cord E2K-LC(15m))	
28	SOR-28(Patch Cord LC-FC(15m))	
29	SOR-29(Patch Cord E2K-FC(15m))	
30	SOR-30(Patch Cord FC-FC(15m))	
31	SOR-31(Patch Cord SC-FC(15m))	
32	SOR-32(Patch Cord E2K - SC(15m))	
33	SOR-33(Patch Cord LC - LC (15 m))	
34	SOR-34(Patch Cord LC - LC (20m))	
35	SOR-35(Patch Cord E2K-LC(20m))	
36	SOR-36(Patch Cord E2K-SCAPC(20m))	
37	SOR-37(SC pigtail)	
38	SOR-38(Attenuators LC to LC (10db))	
39	SOR-39(Attenuators LC to LC (05db))	

40	SOR-40(Attenuators LC to LC (2db))	
41	SOR-41(Attenuators SC to SC(10 db))	
42	SOR-42(FMS SC/APC(12 Port))	
43	SOR-43(FMS SC/APC(24 Port))	
44	SOR-44(FMS SC/APC(48 Port))	
45	SOR-45(FMS LC/APC(24 Port))	
46	SOR-46(FMS LC/APC(48 Port))	
47	SOR-47(FMS E2k/APC(24 Port))	
48	SOR-48(FMS E2k/APC(48 Port))	
49	SOR-49(FMS FC/APC(24 Port))	

(END OF TENDER DOCUMENT)
