

बिड दस्तावेज़ / Bid Document

बिड विवरण / Bid Details	
बिड बंद होने की तारीख/समय / Bid End Date/Time	21-07-2026 18:00:00
बिड खुलने की तारीख/समय / Bid Opening Date/Time	21-07-2026 18:30:00
बिड पेशकश वैधता (बंद होने की तारीख से) / Bid Offer Validity (From End Date)	180 (Days)
मंत्रालय/राज्य का नाम / Ministry/State Name	Ministry Of Communications
विभाग का नाम / Department Name	Department Of Telecommunications (dot)
संगठन का नाम / Organisation Name	Iti Limited
कार्यालय का नाम / Office Name	Raebareli
शिकायत निवारण के संपर्क विवरण / Contact details of Grievance redressal	HOD Email id : buyer9.il.up@gembuyer.in Buyer Email id: buycon46.il.up@gembuyer.in
कुल मात्रा / Total Quantity	303
वस्तु श्रेणी / Item Category	Optical Fiber: SM, G652D
GeMARPTS में खोजी गई स्ट्रिंग्स / Searched Strings used in GeMARPTS	Optical Fiber : SM, G652D
GeMARPTS में खोजा गया परिणाम / Searched Result generated in GeMARPTS	Optical Fibre Cable for Networking, Optical Network Terminal (ONT), Splice Closure for Optical Fiber Cables (V2) (Suitable For Non-Ribbon Fibre Splicing) As Per TEC Specification, Fiber Optic Patch Cord (V2), Fiber Optic Pigtails, Ribbon Optical Fiber Splicing Machine as per TEC Specification, Fiber Optics Trainer Kit For Educational Purpose, Fiber optic tool kit, All Dielectric Self-Supporting (ADSS) Optical Fibre Cable As per TEC Specification (V2), Fibre Media Converters (V2)
अधिसूचना के लिए चयनित प्रासंगिक श्रेणियाँ / Relevant Categories selected for notification	<ul style="list-style-type: none"> Optical Fibre Cable for Networking
बिडर का न्यूनतम औसत वार्षिक टर्नओवर (3 वर्षों का) / Minimum Average Annual Turnover of the bidder (For 3 Years)	2 Lakh (s)
मूल उपकरण निर्माता का औसत टर्नओवर (गत 3 वर्षों का) / OEM Average Turnover (Last 3 Years)	2 Lakh (s)

बिड विवरण/Bid Details	
उन्हीं/समान सेवा के लिए अपेक्षित विगत अनुभव के वर्ष/ Years of Past Experience Required for same/similar service	3 Year (s)
वर्षों के अनुभव एवं टर्नओवर से एमएसई को छूट प्राप्त है / MSE Relaxation for Years Of Experience and Turnover	Yes Complete
स्टार्टअप के लिए अनुभव के वर्षों और टर्नओवर से छूट प्रदान की गई है / Startup Relaxation for Years Of Experience and Turnover	Yes Complete
विक्रेता से मांगे गए दस्तावेज़/ Document required from seller	Experience Criteria,Past Performance,Bidder Turnover,Certificate (Requested in ATC),OEM Authorization Certificate,OEM Annual Turnover *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
क्या आप निविदाकारों द्वारा अपलोड किए गए दस्तावेज़ों को निविदा में भाग लेने वाले सभी निविदाकारों को दिखाना चाहते हैं? संदर्भ मेनू है/ Do you want to show documents uploaded by bidders to all bidders participated in bid?	Yes (Documents submitted as part of a clarification or representation during the tender/bid process will also be displayed to other participated bidders after log in)
बिड लगाने की समय सीमा स्वतः नहीं बढ़ाने के लिए आवश्यक बिड की संख्या। / Minimum number of bids required to disable automatic bid extension	2
दिनों की संख्या, जिनके लिए बिड लगाने की समय-सीमा बढ़ाई जाएगी। / Number of days for which Bid would be auto-extended	3
ऑटो एक्सटेंशन अधिकतम कितनी बार किया जाना है। / Number of Auto Extension count	1
विगत प्रदर्शन / Past Performance	30 %
बिड से रिवर्स नीलामी सक्रिय किया/ Bid to RA enabled	No
बिड का प्रकार/ Type of Bid	Two Packet Bid
तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय / Time allowed for Technical Clarifications during technical evaluation	2 Days
निरीक्षण आवश्यक (सूचीबद्ध निरीक्षण प्राधिकरण /जेम के साथ पूर्व पंजीकृत एजेंसियों द्वारा)/ Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)	No
Payment Timelines	Payments shall be made to the Seller within 45 days of issue of consignee receipt-cum-acceptance certificate (CRAC) and on-line submission of bills (This is in supersession of 10 days time as provided in clause 12 of GeM GTC)

बिड विवरण/Bid Details

मूल्यांकन पद्धति/Evaluation Method	Total value wise evaluation
मध्यस्थता खंड/Arbitration Clause	No
सुलह खंड/Mediation Clause	No

ईएमडी विवरण/EMD Detail

आवश्यकता/Required	No
-------------------	----

ईपीबीजी विवरण /ePBG Detail

आवश्यकता/Required	No
-------------------	----

बोली विभाजन लागू नहीं किया गया/ Bid splitting not applied.

एमआईआई खरीद वरीयता / MII Purchase Preference

एमआईआई खरीद वरीयता / MII Purchase Preference	Yes
मेक इन इंडिया विक्रेताओं को खरीद में प्राथमिकता, यदि उनका मूल्य L1+X% तक की सीमा में है / Purchase Preference to MII sellers available upto price within L1+X%	20
मेक इन इंडिया खरीद में प्राथमिकता के लिए बिड की मात्रा का अधिकतम प्रतिशत / Maximum Percentage of Bid quantity for MII purchase preference	50
सार्वजनिक खरीद (मेक-इन-इंडिया को प्राथमिकता) आदेश 2017 के अनुसार केवल क्लास 1/क्लास 2 के स्थानीय आपूर्तिकर्ताओं को ही भागीदारी की अनुमति है दिनांक 16.09.2020 (समय-समय पर संशोधित एवं लागू) / Allow participation only from Class 1/Class 2 local suppliers as per the Public procurement(Preference to Make-in-india) order 2017 date 16.09.2020(as amended and applicable time to time)	Yes, in compliance with the MII ORDER : DPIIT Order(as amended and applicable time to time)

एमएसई खरीद वरीयता/MSE Purchase Preference

एमएसई खरीद वरीयता/MSE Purchase Preference	Yes
सूक्ष्म और लघु उद्यम मूल उपकरण निर्माताओं/सेवा प्रदाता को खरीद में प्राथमिकता, यदि उनका मूल्य L1+X% / Purchase Preference to MSE OEMs/ Service Provider available upto price within L1+X%	15

सूक्ष्म और लघु उद्यम मूल उपकरण निर्माता/सेवा प्रदाता को खरीद में प्राथमिकता के लिए बिड की मात्रा का अधिकतम प्रतिशत / Percentage of Bid quantity/amount for MSE OEMs/ Service Provider Purchase preference	25
---	----

ट्रेड्स भुगतान संबंधी विवरण/TReDS Payment Details

This Bid provides for Trade Receivables Discounting System (TReDS) as Preferred mode of payment. For MSME sellers, payments may be processed through a TReDS exchange in which the Buyer is registered, subject to applicable policy and regulatory guidelines. Accordingly, sellers intending to avail payment through TReDS are required to be registered with at least one TReDS exchange in which the buyer is registered.

1. If the bidder is a Micro or Small Enterprise as per latest orders issued by Ministry of MSME, the bidder shall be relaxed from the eligibility criteria of "Experience Criteria" as defined above subject to meeting of quality and technical specifications. The bidder seeking Relaxation from Experience Criteria, shall upload the supporting documents to prove his eligibility for Relaxation.
2. If the bidder is a Micro or Small Enterprise (MSE) as per latest orders issued by Ministry of MSME, the bidder shall be relaxed from the eligibility criteria of "Bidder Turnover" as defined above subject to meeting of quality and technical specifications. If the bidder itself is MSE OEM of the offered products, it would be relaxed from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. The bidder seeking Relaxation from Turnover, shall upload the supporting documents to prove his eligibility for Relaxation.
3. If the bidder is a DPIIT registered Startup, the bidder shall be relaxed from the the eligibility criteria of "Experience Criteria" as defined above subject to their meeting of quality and technical specifications. The bidder seeking Relaxation from Experience Criteria, shall upload the supporting documents to prove his eligibility for Relaxation.
4. If the bidder is a DPIIT registered Startup, the bidder shall be relaxed from the the eligibility criteria of "Bidder Turnover" as defined above subject to their meeting of quality and technical specifications. If the bidder is DPIIT Registered OEM of the offered products, it would be relaxed from the "OEM Average Turnover" criteria also subject to meeting of quality and technical specifications. The bidder seeking Relaxation from Turnover shall upload the supporting documents to prove his eligibility for Relaxation.
5. The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated above in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3-year-old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
6. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM of the product offered in the bid {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU for number of Financial years as indicated above in the bid document before the bid opening date. Copies of relevant contracts and delivery acceptance certificates like CRAC to be submitted along with bid in support of having supplied some quantity during each of the Financial year. In case of bunch bids, the category of primary product having highest value should meet this criterion.
7. OEM Turn Over Criteria: The minimum average annual financial turnover of the OEM of the offered product during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the OEM is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
8. Preference to Make In India products (For bids < 200 Crore):Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company

and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate .The buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023.

[OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017 and its subsequent Orders/Notifications issued by concerned Ministry .Benefits of MSE will be allowed only if seller/service provider is validated on-line in GeM profile as well as validated and approved by Buyer after evaluation of documents submitted.

9. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs having valid Udyam Certificate and whose credentials are validated online through Udyam Registration portal as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail themselves of the Purchase preference, the bidder must be the manufacturer / OEM of the offered product on GeM. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises and hence resellers offering products manufactured by some other OEM are not eligible for any purchase preference. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service, and Buyer will decide eligibility for purchase preference based on documentary evidence submitted in case of product bids, whereas in case of services the eligibility is automatically validated. If L-1 is not an MSE and MSE Seller (s) has / have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such MSE Seller shall be given opportunity to match L-1 price and contract will be awarded for 25% (selected by Buyer) percentage of total quantity. The buyers are advised to refer the [OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017. Benefits of MSE will be allowed only if seller is validated on-line in GeM profile as well as validated and approved by Buyer after evaluation of documents submitted.

10. Past Performance: The Bidder or its OEM {themselves or through re-seller(s)} should have supplied same or similar Category Products for 30% of bid quantity, in at least one of the last three Financial years before the bid opening date to any Central / State Govt Organization / PSU. Copies of relevant contracts (proving supply of cumulative order quantity in any one financial year) to be submitted along with bid in support of quantity supplied in the relevant Financial year. In case of bunch bids, the category related to primary product having highest bid value should meet this criterion.

Optical Fiber: SM, G652D (303 kilometer)

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

तकनीकी विशिष्टियाँ /Technical Specifications

क्रेता विशिष्टि दस्तावेज़ /Buyer Specification Document	Download
---	--------------------------

परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.No.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Pushp Raj	229010,ITI LTD, Sultanpur Road, Raebareli	303	30

क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें/**Buyer Added Bid Specific Terms and Conditions**

1. **Generic**

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity up to 25% of the contracted quantity during the currency of the contract at the contracted rates. The delivery period of quantity shall commence from the last date of original delivery order and in cases where option clause is exercised during the extended delivery period the additional time shall commence from the last date of extended delivery period. The additional delivery time shall be $(\text{Increased quantity} \div \text{Original quantity}) \times \text{Original delivery period (in days)}$, subject to minimum of 30 days. If the original delivery period is less than 30 days, the additional time equals the original delivery period. The Purchaser may extend this calculated delivery duration up to the original delivery period while exercising the option clause. Bidders must comply with these terms.

2. **Buyer Added Bid Specific ATC**

Buyer uploaded ATC document [Click here to view the file.](#)

अस्वीकरण/**Disclaimer**

The Additional Terms and Conditions (ATC) have been incorporated by the Buyer after approval of their Competent Authority. The Buyer, is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any restriction arising in the bidding process due to these ATCs and including the modification of technical specifications and / or terms and conditions governing the bid. All representations / grievances pertaining to the ATC clauses shall be raised with the buyer organization directly and not with GeM. If any of the clause(s) is/are incorporated by the Buyer regarding the following, the bid & resultant contract shall be treated as null & void. Further, GeM reserves the right, at its sole discretion, to cancel the bid forthwith, without issuance of any prior notice or intimation :-

1. Publishing Custom / BOQ bids for items for which regular GeM categories are available (unless such Custom / BOQ item is bunched with the major regular product Category Item).
2. Mandating procurement of / from specific Brand / Make / Model / Manufacturer / Dealer except in case of Single Bid / Proprietary Article Certificate (PAC) Buying.
3. Inclusion of disqualification criteria related to suspension of seller / service provider, where such suspension period has already expired.
4. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
5. Publishing bids on GeM for procurement of works.
6. Procurement of Goods by creating a Service bid on GeM & vice-versa.
7. Seeking sample with bid or approval of samples during bid evaluation process. However, trial / sample, as the case may be, shall be permitted in cases where trial / sample are allowed as per approved and published procurement policy of the Buyers' controlling Ministry / Department / State / Public Sector Enterprises Headquarters. If there is any violation of trial / sample clause with regard to approved policy of the Buyers' Ministry / Department / State / Public Sector Enterprises Headquarters, then this is to be determined and redressed by the concerned Buyer Organisation only.
8. Seeking experience from specific organization / department / institute only or from foreign / export experience.
9. Creating bid for items from incorrect categories.
10. Reference of conditions published on any external site or reference to external documents/clauses.
11. Asking for any Tender fee / Bid Participation fee, as the case may be.
12. Buyer added ATC Clauses which are in contravention of clauses defined in bid detail section, including specifications, EMD Detail, ePBG Detail and MII and MSE Purchase Preference sections of the bid, unless otherwise allowed by the applicable GeM GTC.
13. Any ATC clause in contravention with GeM GTC Clause 4 (xiii) (h) will be invalid. In case of multiple L1 bidders against a service bid, the buyer shall place the Contract by selection of a bidder amongst the L-1 bidders through a Random Algorithm executed by GeM system.

14. In a category based bid, adding additional items, through buyer added, additional scope of work/ additional terms and conditions/or any other document. If buyer needs more items along with the main item, the same must be added through bunching category based items or by bunching custom catalogues or bunching a BoQ with the main category based item, the same must not be done through ATC or Scope of Work.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

All GeM Sellers/Service Providers shall ensure full compliance with all applicable labour laws, including the provisions, rules, schemes and guidelines under the four Labour Codes i.e. the Code on Wages, 2019; the Industrial Relations Code, 2020; the Occupational Safety, Health and Working Conditions Code, 2020; and the Code on Social Security, 2020 as and when notified and brought into force by the Government of India.

For all provisions of the Labour Codes that are pending operationalisation through rules, schemes or notifications, the corresponding provisions of the pre-existing labour enactments (such as The Minimum Wages Act, 1948, The Payment of Wages Act, 1936, The Payment of Bonus Act, 1965, The Equal Remuneration Act, 1976, The Payment of Gratuity Act, 1972, etc. and relevant State Rules) shall continue to remain applicable.

The Seller/ Service Providers shall, therefore, be responsible for ensuring compliance under:

- **All notified and enforceable provisions of the new Labour Codes as mentioned hereinabove; and**
- **All operative provisions of the erstwhile Labour Laws until their complete substitution.**

All obligations relating to wages, social security, safety, working conditions, industrial relations etc. and any other statutory requirements shall be strictly met by the Seller/ Service Provider. Any non-compliance shall constitute a breach of the contract and shall entitle the Buyer to take appropriate action in accordance with the contract and applicable law.

This Bid is governed by the General Terms and Conditions, conditions stipulated in Bid and Service Level Agreement specific to the Service, as the case may be, as provided in the Marketplace.

However, in case of Service, if any condition specified in General Terms and Conditions is contradicted by the conditions stipulated in Service Level Agreement specific to said Service, then it will over-ride the conditions in the General Terms and Conditions.

[यह बिड सामान्य शर्तों के अंतर्गत भी शासित है /This Bid is also governed by the General Terms and Conditions](#)

जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो। बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्यवाई का आधार होगा।/In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, 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. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws.

---धन्यवाद/Thank You---

TABLE OF CONTENT

Sl No.	CONTENT	PAGE NO
1	BID DOCUMENT	2-6
2	ATC/ Checklist	7-7
3	BID SECURITY DECLARATION	8-8
4	INTEGRITY PACT	9-11
5	ANNEXURE A (Other term and Conditions/ Specification)	12-19



BID DOCUMENT

GeM

**SUPPLY OF Optical Fibre : SM, G652D AS PER TECHNICAL SPECIFICATION
MENTIONED IN BID DOCUMENT AND ANNEXURE A**

TENDER NO- AS per GeM

DUE DATE: 14 Days from the date of uploading tender.

DGM (PPM , MKT & HR)

ITI LIMITED

(A Government of India Undertaking)

Sultanpur Road, RAE BARELI-229010 (U.P)

Visit us at www.itiltd.in



ITI LIMITED

(A GOVT. OF INDIA UNDER TAKING)

SULTANPUR ROAD , RAE BARELI -229010 (UP) INDIA

Tel.: 0535 -2287565 , 0535-2287387 FAX: 0535-2702106,

E-mail: rcyadav_rbl@itilttd.co.in, indrajeet_rbl@itilttd.co.in

TENDER ENQUIRY NO.: As per GeM

DUE DATE: 14 Days from the date of uploading tender

To,

Dear Sir,

Please quote your prices & Delivery for the following items as per attached Terms and conditions:

Item No.	ITI CODE	Item Description	Qty. Required	Delivery required
1-	ORM-FBRG652D-000	Optical Fiber : SM,G652D	302.4 Km	100% of P O qty. within one month from the date of placement of PO

NOTE:

(1) Technical Specifications are as per enclosed.

(2) Other requirement:

- Spool length for total quantity will be of good length i.e 25.2 km & 50.4 km only.
- Material shall comply ORM TEC 89010:2021 or latest amendments if any.
- Test Certificate must be submitted by the party at the time of supply.
- Other Terms & Condition will be as per Annexure A .
- Payment terms- LC 60 days .

Special Note:

1. Please confirm material specification, strictly as per our enquiry in your quotation.
2. Quote the basic rate, GST, freight, & HSN code of material separately.
3. Any product / item found faulty during our manufacturing process / system testing / installation and commissioning / operation of our equipment in field due to deviation from our specifications shall be replaced by vendor free of cost immediately.
4. In case of any dispute only Rae Bareli court will have jurisdiction to try the suit if any.
5. The above enquiry is also available in our website www.itilttd.india.com ,Govt.website www.eprocure.gov.in &www.gem.gov.in
6. Price must be on FOR ITI RBL basis inclusive of insurance charges.
7. **Test Certificate with batch number mentioned in Invoice and TC must be provided by the vendor at the time of supply.**
8. Vendors have to indicate whether they are MSME Registered, vendor/DIPP recognized Start-ups with supporting documents.
9. MSME vendors have to indicate whether they are SC/ ST owned or women owned.

Yours faithfully
For ITI Limited, Raebareli
Ramesh Chand Yadav
DGM (PPM , MKT & HR)

TERMS AND CONDITIONS

1. **SUBMISSION OF TENDERS:** (A) This is only an enquiry to quote and not an order. This tender enquiry is not transferable.
2. **OPENING OF TENDERS:**
Tenders against enquiries will be opened in the presence of the tenderer/authorized representative on the due date of the tender itself / the next working day.

NOTE :

- a. Send your quote well in advance of due date to avoid delay.
 - b. Please indicate the Sl.No. and Code/Description exactly as per our enquiry.
- (3) Any substitute or alternate code quoted should be clearly stated. In case the Item quoted is under obsolescence, the same may be indicated with best last date of P.O and supply feasibility.

PRICES :

- a. ITI is planning to have long-term tie up with limited vendors, who can keep up good quality, prompt delivery and lowest cost. Hence, you may quote in such a way that a long-term relationship is possible.
- b. Prices must be per unit as called for in the enquiry and should be on F.O.R, ITI Works basis only and inclusive of insurance charges. In such an event, while tabulating the offers, insurance is not to be reckoned and should include weather proof packing adequate to withstand transshipment damages. Local supplier's offers should be on F.O.R delivery at our Stores in our Plant.
- c. ITI, under normal circumstances, may not negotiate for the price. We may also short list only two to three suppliers for ordering. Hence you are requested to quote your best price in the original quotation itself.
- d. Any counter terms and conditions are not binding on us unless we agree to the same in writing.
- e. In case of an order on you, the ordered rate should be firm till the completion of the order. In case where the market prices of your inputs are fluctuating too frequently, you shall clearly define price variation clause. Please note that any variation in price up to 5% due to variation in FE / statutory levies will be absorbed by the supplier. However, for variation beyond 5% due to variation in FE / statutory levies, the burden of price increase / advantage of price decrease will be shared equally between ITI and the supplier.
- f. Vendors should deliver the material to ITI-Stores irrespective of whether they are Raebareli based or from outstation. Out station vendors can make use of their local representative / Courier Service / Surface transport on door delivery basis to deliver the material at ITI-Stores. ITI will not take the responsibility of clearing the goods from the carrier's godown / office / railway station / airport etc.
- g. In case of supply of imported items by local dealers proof of import should be provided. Prices quoted should indicate clearly the Modvat relief (by way of C.V.D), being passed on to ITI and supplier should furnish regular invoice indicating rate and amount of duty that is passed on which should be proportionate to the materials sold to ITI from the relevant imported consignment, covered under this appropriate Bill of Entry.

STATUTORY LEVIES:

- a. All applicable statutory levies like GST etc., should be separately indicated with the current rate applicable. Otherwise rate quoted will be deemed as inclusive of taxes / levies. Vague terms like "As applicable at the time of supply" should be avoided. Apart from statutory levies other charges like handling, P&F etc., will not be paid by us.
- b. In case of GST exempted delivery, authorization letter from the competent authority should be enclosed along with the quote.
- c. In case of your absorbing the GST portion, the same may be specified clearly in the quotation itself and not after the tender opening, which otherwise will be treated as post-tender correction and would disqualify your quote.
- d. In case of statutory levies like GST Surcharge etc., are modified the same has to be intimated to ITI immediately.

MODVAT RELIEF :

- a. We are eligible to avail the credit of GST paid on items procured for manufacturing Tele-communication equipments under MODVAT RELIEF scheme. Hence "Invoice Cum Gate Pass" in original for payment, and transporter copy duly marked and authenticated is to be produced along with the consignment. In case of your failing to adhere to this instruction, no GST will be reimbursed by us.
- b. Invoices should be in the prescribed form and have all particulars as per the GST Rules and notifications as amended from time to time, particularly Assessor code, Range Division, rate and amount of duty debited and Debit particulars.
- c. Agents/Distributors, on whom an order is placed should also produce Invoice Cum Gate Pass as per the procedure laid down by GST Rules and notifications issued from time to time. They should get registered with GST authorities where GST is being passed on.

7. TERMS OF PAYMENTS:
- a. ITI prefers **LC PAYMENT 60 days**. For any variation in payment terms quoted by different vendors, loading in the comparative statement will be made suitably.
- b. **NO PAYMENT WILL BE MADE FOR THE REJECTED QUANTITY.**
- c. In case you fall under SSI as per DIC, please mention the same in all your quotations / invoices indicating also the certificate number. This is essential if in the unlikely event of delay in payment, you would like to claim preferential payment as an S.S.I.
8. INSPECTION :
- b. We are planning to reduce inspection time with self-certification scheme for the vendors who keep up good quality leading to “ship to stock system”.
- c. Inspection of the material at our works will be final. ITI reserves the right to inspect the material at any other standard testing center authorised by us.
- d. We or our representative including our customer may if required preliminarily inspect the product at vendor’s premises. Such verification shall not absolve the vendor of the responsibility to provide the acceptable product nor shall preclude subsequent rejection during the final inspection at our works. It is the responsibility of every vendor to ensure that only the inspected materials conforming to our specifications / drawings/requirements are supplied.
- e. The supplies shall be from the latest batch of production. Batch Number should be indicated on the components/packet/test certificate and accompanying delivery challan / test certificate.
- f. Test certificate / check list should accompany each supply. Consignments without test certificate are liable for rejection. Rejected material should be collected immediately (within 30 days) after our intimation by giving two days prior notice for completing the necessary GST FORMALITIES. You should make arrangements to collect the material either personally, OR through your authorised representatives. ITI does not take any responsibility to send the material back to you. After 90 days from the date of rejection intimation to you the material will be scrapped at your risk if not collected.
9. SAMPLES :
Those tenderers who have not supplied the material against any of our earlier orders, should submit FREE SAMPLES clearly indicating enquiry reference. Free samples along with your offer is preferable. In case of a Purchase Order on you, bulk supply should commence only after approval of samples.
10. WARRANTY :
Please note that we are an ISO 9002 accredited company. All our equipments/systems have a warranty of 18 months from the date of despatch to our customer. Hence the warranty of your products should be for a minimum period of 24 months from the date of supply. Within this warranty period, if any of your component/subsystem is found defective during our manufacturing process/system testing/installation and commissioning/operation of our equipment in the field, the same is to be replaced free of cost immediately by you.”
11. GENERAL :
- a. We reserve the right to accept or reject any or all offers and to order full or part quantities or cancellation thereof without assigning any reason whatsoever.
- b. Successful tenderer only will be intimated by post through/letter of intent/firm orders.
- c. Canvassing by tenderers in any form including un-solicited letters against tenders submitted or post-tender corrections shall render their tenders liable for summary rejection.
12. DELIVERY SCHEDULE :
- a. Please indicate minimum LEAD TIME REQUIRED, manufacturing capacity and the quantity that can be reserved for us.
- b. Liquidated Damages Clause :
Time is the essence of contract and the materials, against an order arising out of this enquiry must be delivered by the supplier according to the delivery schedule indicated in the P.O. In case of any change, the supplier should inform us in advance and obtain our approval to the revised delivery schedule. Should the supplier fail to deliver the material or part thereof as per the delivery schedule, or any extension thereof, we shall be entitled at our option either to recover from the supplier, as penalty, a sum equivalent to ½% (half percent) per week for first four weeks and 0.7% per week thereafter for such delay or part thereof or terminate the contract in respect of the balance supply so delayed and purchase materials elsewhere at the risk and cost of the defaulting supplier.
13. SECURITY DEPOSIT :
In case of an order on you, you will have to agree for an interest free security deposit of 5% of order value subject to a maximum of Rs 10 Lakhs, by cash or draft only which will be forfeited in case you fail to execute the order to our satisfaction in all respects. This clause may be waived off in case of approved or established suppliers. However, the sole discretion lies with ITI.
14. FABRICATION ORDERS ONLY :
In case of Fabrication Orders:
- a. Necessary Bank guarantee towards the cost of raw material / component to be issued by ITI would be necessary.
- b. A quality agreement has to be entered into with ITI before commencing supply.
- c. Furnish the particulars of the Income Tax such as
- i) ACCOUNT NO.

- ii) Place where Income Tax Circle is situated along with tender documents. otherwise such tenders are liable for rejection.
- d. The technical know-how Literature, specifications etc., if furnished to you alongwith this Purchase Enquiry/Order are strictly for the limited purpose of supplying / manufacturing the items mentioned therein and you shall have no right to make use of the same for any other purpose or to execute any other order or pass on the same to others. The aforesaid know-how, literature, specification etc., must be returned to us in case you regret to quote / after executing the orders as the case may be.
- e. Further Please certify that :
- i) The know-how will not be passed on to others.
- ii) No export will be done by you directly without arriving at a commercial understanding with ITI Ltd.
- iii) No supply will be made by you to any outside agency without ITI's prior approval and commercial understanding.
- iv) Kits/components will not be diverted to other orders.
- v) Drawing if any should be returned, along with your offer.
- f. Tax would be deducted at source under the T.D.S scheme as per IT rules at appropriate rates, wherever applicable. Any exemption or recovery at lower rates would be considered only on production of appropriate certificates issued by IT officers concerned. T.D.S Certificates would be issued after the 15th of following month.
15. LOCAL REPRESENTATION :
Please indicate your local representative's address, telephone, Fax No., E-mail Id, the person to be contacted, in the offer.
16. TECHNICAL CATALOGUE :
In the event of any change in the technical catalogue, updated version may be sent to us immediately. It is essential that you simultaneously take up the same with approving authority and their approval copy sent to us.
17. Issue of "C" Form / Form"37" will be done on financial year wise as per the statement to be furnished by you as below in quadruplicate. We will be only endorsing on the same. Any qualification criteria VDC approval etc may be considered.VDC approval required.....
18. GOVERNING LAW :
All suits shall be instituted in a court of competent jurisdiction at Rae Bareli and in case of arbitration, the Indian Arbitration Act, 1996 is applicable.

Yours faithfully
For ITI Limited, Raebareli
Ramesh Chand Yadav
DGM (PPM , MKT & HR)

CHECK LIST

(Tender No. _____ and due date: _____)

(Please ensure that following documents/details have been enclosed /accepted)

Sl. No.	Particulars	Status	Please tick (√)
1	Every page of tender duly signed, stamped and attached.	Yes	
2	Validity of offer 180 days from the tender opening date	Yes	
3	Quoted prices Shall be firm during the period of supply - Accepted	Yes	
4	Following declarations on party letterhead enclosed in ATC " on GeM Portal a) We hereby certify that we have not been blacklisted by any Public Sector Undertaking/Public Department. b)We have gone through the terms and conditions given in your above tender form, is accepted and agreed by us	Yes	
5	Party to indicate HSN Code: and GST:..... % for the quoted item.	Yes	
6	The delivery term shall be "FOR ITI Raebareli Stores" .	Yes	
7	The Payment term shall be "LC 60 days from the date of receipt of material at ITI Raebareli".	Yes	
8	ITI Raebareli reserves the right to reject any offer due to non-compliance with the above conditions and/or non-receipt of this form in duly filled condition - Agreed	Yes	
9	For delivery term FOR ITI Raebareli, Transit insurance shall be at party's end and it should be included in quoted basic rate.	Yes	
10	Integrity Pact document accepted and Signed by Party	Yes	
11	Declaration that the party is the manufacturer of the quoted items Enclosed	Yes	
12	Vender to undertake declaration on the letter head about supply of material uninterrupted supplies as per ITI's monthly/ quarterly delivery schedule Enclosed	Yes	
13	MSME Registration, If the firm is registered as Micro/Small/Medium Enterprises as per MSME Act, 2006, the same may be confirmed by the tenderer and submit a photocopy (Self certified) of the registration certificate in support thereof. Otherwise it will be construed that the firm is not registered as per MSME Act, 2006.	Yes	
14	The Valid CACT Approval is required. Please submit CACT certificate alongwith quotation.	Yes	
15	Material Shall comply ORM TEC 89010:2021 or latest amendments if any & it's latest amendments	Yes	
16	Life time certificate for 25 years is required. Please submit Lifetime certificate along with quotation.	Yes	
17	A valid CACT certificate, MSDS (Material Safety Data Sheet), non-Hydrogen evolution certificate /declaration shall be mandatory for all CACT approved raw materials.	Yes	
18	Bid Security Declaration document accepted and Signed by Party	Yes	
19	Test Certificate must be submitted by the party at the time of supply	Yes	
20	Minimum average annual turnover of bidder should be Rs. 2 Lakh during last three financial years (i.e.2023-24, 2024-25 and 2025-26 supported by documentary proof/audited or CA certified statement of accounts.)	Yes	
21	Bidder shall submit signed and stamped Manufacturer Authorization Certificate / Self Manufacturer Certificate on OEM Letter head.	Yes	

The desired documents must be uploaded on **GeM Portal** in column of "ATC ".

Signature of the Tenderer with SEAL

RFP/Tender Ref No:

Dated:

Annexure-III

Bid Securing Declaration Form

<Letterhead of the bidder>

<Date>

To ITI LIMITED RAEBARELI,
SULTANPUR ROAD, RAEBARELI-229010

I/We. The undersigned, declare that:

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

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

- a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity or its extended period, if any; or
- b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Bank Guarantee, in accordance with the Instructions to Bidders.
- c) If the bidder is found indulging in any corrupt, fraudulent or other malpractice in respect of the bid; or
- d) If there is a discrepancy between words and figures quoted by the bidder and the bidder does not accept that the amount in words prevails over amount in figure.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown)

in the capacity of (insert legal capacity of person signing the Bid Securing Declaration)

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

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

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

Corporate Seal (where appropriate)

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

INTEGRITY PACT

PURCHASE ORDER No.

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

BETWEEN:

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

AND:

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

Preamble

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

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

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

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

SECTION 1 – COMMITMENTS OF THE PRINCIPAL

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

- a. No employee of the Principal, personally or through family members, will in connection with the tender for or the execution of the contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the personal is not legally entitled to.
- b. The Principal will, during the tender process treat all bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all bidder(s) the same information and will not provide to any bidder(s) confidential/additional information through which the bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- c. The Principal will exclude from the process all known prejudiced persons.

1.2 If the Principal obtains information on the conduct of any of its employee, which is a criminal offence under IPC/PC Act or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary action as per its internal laid down Rules/ Regulations.

SECTION 2 – COMMITMENTS OF THE BIDDER/CONTRACTOR

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

- a. The contractor(s) will not, directly or through any other person or firm offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- b. The contractor(s) will not enter with other contractors into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- c. The contractor(s) will not commit any offence under IPC/PC Act, further the contractor(s) will not use improperly, for purposes of competition of personal gain, or pass onto others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d. The Contractor(s) of foreign origin shall disclose the name and address of the agents/representatives in India, if any. Similarly, the Bidder(s)/Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any.
- e. The Contractor(s) will, when presenting the bid, disclose any and all payments made, are committed to or intend to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- f. The Contractor(s) will not bring any outside influence and Govt bodies directly or indirectly on the bidding process in furtherance to his bid.
- g. The Contractor(s) will not instigate third persons to commit offences outlined above or to be an accessory to such offences.

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

- 3.1 If the Contractor(s), during tender process or before the award of the contract or during execution has committed a transgression in violation of Section 2, above or in any other form such as to put his reliability or credibility in question the Principal is entitled to disqualify Contractor(s) from the tender process.
- 3.2 If the Contractor(s), has committed a transgression through a violation of Section 2 of the above, such as to put his reliability or credibility into question, the Principal shall be entitled to exclude including blacklisting for future contract award process. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the Principal taking into consideration the full facts and circumstances of each case, particularly taking into account the number of transgression, the position of the transgressor within the company hierarchy of the Contractor(s) and the amount of the damage. The exclusion will be imposed for a period of minimum one year.
- 3.3 The Contractor(s) with its free consent and without any influence agrees and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground including the lack of any hearing before the decision to resort to such exclusion is taken. The undertaking is given freely and after obtaining independent legal advice.
- 3.4 A transgression is considered to have occurred if the Principal after due consideration of the available evidence concludes that on the basis of facts available there are no material doubts.
- 3.5 The decision of the Principal to the effect that breach of the provisions of this Integrity Pact has been committed by the Bidder(s)/ Contractor(s) shall be final and binding on the Bidder(s)/ Contractor(s), however the Bidder(s)/ Contractor(s) can approach IEM(s) appointed for the purpose of this Pact.
- 3.6 On occurrence of any sanctions/ disqualifications etc arising out from violation of integrity pact Bidder(s)/ Contractor(s) shall not be entitled for any compensation on this account.
- 3.7 subject to full satisfaction of the Principal, the exclusion of the Contractor(s) could be revoked by the Principal if the Contractor(s) can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption preventative system in his organization.

SECTION 4 – PREVIOUS TRANSGRESSION

- 4.1 The Contractor(s) declares that no previous transgression occurred in the last 3 years immediately before signing of this Integrity Pact with any other company in any country conforming to the anti-corruption/ transparency International (TI) approach or with any other Public Sector Enterprises/ Undertaking in India of any Government Department in India that could justify his exclusion from the tender process.
- 4.2 If the Contractor(s) makes an incorrect statement on this subject, he can be disqualified from the tender process or action for his exclusion can be taken as mentioned under Section-3 of the above for transgressions of Section-2 of the above and shall be liable for compensation for damages as per Section- 5 of this Pact.

SECTION 5 – COMPENSATION FOR DAMAGE

- 5.1 If the Principal has disqualified the Bidder(s)/Contractor(s) from the tender process prior to the award according to Section 3 the Principal is entitled to forfeit the Earnest Money Deposit/Bid Security/ or demand and recover the damages equivalent to Earnest Money Deposit/Bid Security apart from any other legal that may have accrued to the Principal.
- 5.2 In addition to 5.1 above the Principal shall be entitled to take recourse to the relevant provision of the contract related to termination of Contract due to Contractor default. In such case, the Principal shall be entitled to forfeit the Performance Bank Guarantee of the Contractor or demand and recover liquidate and all damages as per the provisions of the contract agreement against termination.

SECTION 6 – EQUAL TREATMENT OF ALL BIDDERS/CONTRACTORS

- 6.1 The Principal will enter into Integrity Pact on all identical terms with all bidders and contractors for identical cases.
- 6.2 The Bidder(s)/Contractor(s) undertakes to get this Pact signed by its sub-contractor(s)/sub-vendor(s)/associate(s), if any, and to submit the same to the Principal along with the tender document/contract before signing the contract. The Bidder(s)/Contractor(s) shall be responsible for any violation(s) of the provisions laid down in the Integrity Pact Agreement by any of its sub-contractors/sub-vendors/associates.
- 6.3 The Principal will disqualify from the tender process all bidders who do not sign this Integrity Pact or violate its provisions.

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

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

SECTION 8 – INDEPENDENT EXTERNAL MONITOR(S)

- 8.1 The Principal appoints competent and credible Independent External Monitor(s) for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this pact.
- 8.2 The Monitor is not subject to any instructions by the representatives of the parties and performs his functions neutrally and independently. He will report to the Chairman and Managing Director of the Principal.
- 8.3 The Contractor(s) accepts that the Monitor has the right to access without restriction to all product documentation of the Principal including that provided by the Contractor(s). The Bidder(s)/Contractor(s) will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The Monitor is under contractual obligation to treat the information and documents Contractor(s) with confidentiality.

Annexure-A

1. A valid CACT Certificate, MSDS (Material Safety Data Sheet), Non Hydrogen evolution Certificate/ Declaration shall be mandatory for both CACT approved raw materials.
2. Life Time Certificate shall be required for 25 years as per GR/ ORM.
3. Test Certificates along with invoices and Batch number must be provided by the party.
4. Raw materials shall comply to specs. as per ORM TEC 89010:2021 and its latest amendments if any.
5. Bidder shall submit signed and stamped Manufacturer Authorization Certificate / Self Manufacturer Certificate on OEM Letter head.

10/4

SECTION – I
(TYPE –I)

GENERIC REQUIREMENTS FOR SINGLE MODE OPTICAL FIBRE
(As per ITU-T Rec. G. 652 D)

1.0 Single Mode Optical Fibre used in manufacturing optical Fibre Cables shall be as per ITU-T Rec. G. 652 D. The specification of optical fibres are mentioned below:

- 1.1 Type of fibre : Single mode Optical Fibre conforming to ITU-T Rec G.652 D.
(Wavelength band optimized nominal 1310 nm)
- 1.2 Geometrical Characteristics:
- 1.2.1 MFD at 1310nm : $9.2 \pm 0.4 \mu\text{m}$
- 1.2.2 Cladding diameter : $125\mu\text{m} \pm 0.7 \mu\text{m}$
- 1.2.3 Cladding Non-circularity : $\leq 0.8\%$
- 1.2.4 Core Clad concentricity error : $\leq 0.5 \mu\text{m}$
- 1.2.5 Diameter over primary coated with double UV cured acrylate. : $242 \pm 5 \mu\text{m}$
(To be measured on uncoloured fibre)

Note: The thickness of colour coating may be over and above the values specified above if the manufacturer adopts separate UV cured colouring process to colour the uncoloured fibres, other than the on line integrated colouring process (of secondary layer of primary coating) of the fibres during fibre manufacturing.

dc

1.2.6 Colored fibre coating diameter : $252 \pm 10\mu\text{m}$

1.2.7 Coating / Cladding Concentricity : $\leq 12 \mu\text{m}$

1.3 Transmission Characteristics:

1.3.1 Attenuation:

a) Fibre attenuation before Cabling

- i) At 1310 nm : $\leq 0.34 \text{ dB/Km}$
- ii) Between 1285 to 1380 nm : $\leq 0.37 \text{ dB/Km}$
- iii) Between 1390 to 1525 nm : $\leq \text{Value at 1310nm}$
- iv) At 1550 nm : $\leq 0.20 \text{ dB/Km}$
- v) Between 1525 to 1625 nm : $\leq 0.24 \text{ dB/Km}$
- vi) At 1270 nm : $\leq 0.40 \text{ dB/km}$
- vii) At 1490 nm : $\leq 0.24 \text{ dB/km}$
- viii) At 1625 nm : $\leq 0.23 \text{ dB/km}$

b) Water Peak Attenuation before cabling

Between 1380-1390 nm : $\leq \text{Value at 1310nm}$

Note:

1. Attenuation in the band 1380-1390nm shall be checked at every 2nm after Hydrogen ageing as per IEC 60793-2-50. Hydrogen ageing test is to be carried out by CACT, Bangalore or any other recognized laboratory for type test.
2. Sudden irregularity in attenuation shall be less than 0.1 dB
3. The Spectral attenuation shall be measured on un-cabled fibre in the 1250nm-1625 nm band at an interval of 10nm and the test results shall be submitted.

c) Fibre attenuation after cabling

- i) At 1310 nm : $\leq 0.36 \text{ dB/km}$
- ii) At 1550 nm : $\leq 0.22 \text{ dB/Km}$
- iii) At 1625 nm : $\leq 0.26 \text{ dB/Km}$
- iv) At 1490nm : $\leq 0.26 \text{ dB/Km}$

d) Water Peak Attenuation after cabling

At 1383nm \pm 3nm : \leq Value at 1310nm

Note: Fibre attenuation after cabling may be checked during approval testing of respective GR of Cable.

1.3.2 Dispersion:

a) Total Dispersion

- i) In 1285-1330 nm band : \leq 3.5 ps/nm. Km
- ii) In 1270-1340 nm band : \leq 5.3 ps/nm. Km
- iii) At 1550 nm. : \leq 18.0 ps/nm. Km
- iv) At 1625 nm : \leq 22.0 ps/nm. Km

Note: The dispersion in the 1250 nm–1625 nm band shall be measured at an interval of 10nm and the test results shall be submitted.

b) Polarization mode dispersion

- i) Un-cabled Fibre : \leq 0.15 ps/ \sqrt km
- ii) Cabled Fibre : \leq 0.3 ps/ \sqrt km
- iii) Link design value for un-cabled fibre : \leq 0.06 ps/ \sqrt km

Note: Measurement on un-cabled fibre may be used to generate cabled fibre statistics and correlation is established.

c) Zero Dispersion Slope : \leq 0.092ps/(nm²·km)

d) Zero dispersion wave length range : 1300 -1324 nm

1.3.3 Cable Cut off wavelength : 1260nm Max.

Note - The above cut off wavelength is w.r.t. 22M sample length of fibre.

AC

1.4 Mechanical Characteristics:

1.4.1 Proof test for minimum strain level : 1%
(Test method IEC-60793-1- 30)

1.4.2 Stripability force to remove primary coating of the Un-aged and Aged fibre
(Water aged and Damp heat aged): (Test method IEC- 60793 - 1 - 32)

- a) Peak strip force : $1 \leq F \leq 8.9 \text{ N}$
- b) Average strip force : $1 \leq F \leq 5 \text{ N}$

Note: The force required to remove 30 mm \pm 3 mm of the fibre coating shall not exceed 8.9 N and shall not be less than 1N.

1.4.3 Dynamic Tensile Strength
(Test method IEC-60793-1-31)

- a) Un-aged : $\geq 550 \text{ KPSI (3.80 GPa)}$
- b) Aged (Damp heat aged) : $\geq 440 \text{ KPSI (3.00 GPa)}$

1.4.4 Dynamic Fatigue :
(Test method IEC-60793-1- 33)

- a) Un-aged: ≥ 20
- b) Aged (Damp heat aged): ≥ 20

1.4.5 Fibre Macro bend
(Test method FOTP – 62/ IEC- 60793-1-47)

- a) Change in attenuation when fibre is coiled : $\leq 0.05 \text{ dB at } 1550\text{nm}$
with 100 turns on 60 \pm 1.0 mm diameter : $\leq 0.1\text{dB at } 1625\text{nm}$
mandrel
- b) Change in attenuation when fibre is coiled : $\leq 0.5 \text{ dB at } 1550\text{nm}$
with 1 turn around 32 \pm 0.5 mm diameter : $\leq 1.0 \text{ dB at } 1625\text{nm}$
mandrel

64

c) Change in attenuation when fibre is coiled : ≤ 0.05 dB at 1310nm
with 100 turns on 50 ± 0.5 mm diameter
mandrel.

1.4.6 Fibre Curl : ≥ 4 meters radius of
(Test method as per IEC 60793-1-34) curvature

1.5 Material Properties:

1.5.1 Fibre Materials:

a) The substances of which fibres are made : To be indicated by the
manufacturer.

b) Protective material requirement:

i) The physical and chemical properties : It shall meet the requirement
of the material used for the fibre primary of fibre stripping force as per
coating and for single jacket fibre. clause No. 1.4.2

ii) The best way of removing protective : To be indicated by the
coating material. Manufacturer.

c) Group refractive Index of fibre : To be indicated by the
manufacturer.

Note: The manufacturer shall indicate the variation in group refractive index of fibre
during bulk production

d) Fibre materials shall be RoHS (Restriction of Hazardous Substance)
complied.

5/4

1.6 Environmental Characteristic of Fibre:

1.6.1 Operating Temperature

(Test Method IEC – 60793 – 1 - 52)

Temperature Dependence of Attenuation : - 60°C to +85°C

Induced Attenuation at 1550nm & 1625 nm
at -60°C to +85° C : ≤ 0.05 dB/km

1.6.2 Temperature – Humidity Cycling

(Test method /EIA/TIA-455-73)

Induced Attenuation at 1550nm & 1625 nm
at -10°C to +85°C and 95% relative humidity. : ≤ 0.05 dB/km

1.6.3 Water Immersion 23°C

(Test method IEC- 60793 – 1- 53)

Induced Attenuation at 1550nm & 1625 nm
due to Water Immersion at $23 \pm 2^\circ\text{C}$: ≤ 0.05 dB/km

1.6.4 Accelerated Aging (Temperature) 85°C

(Test method IEC- 60793 – 1- 51)

Induced Attenuation at 1550 nm & 1625 nm
due to Temperature Aging at $85 \pm 2^\circ\text{C}$: ≤ 0.05dB/km

1.6.5 Retention of Coating Color

(Test method IEC- 60793 – 1- 51)

Coated Fibre shall show no discernible change : 30 days at 85°C with 95%
in colour when aged for relative humidity humidity and then 20 days in
85°C dry heat.

1.6.6. High Temperature and High Humidity (Damp Heat)

(Test Method IEC 60793-2-50)

Induced attenuation at 1550nm & 1625nm at
85°C and 85% Relative Humidity for 30 days : ≤ 0.05 dB/km

4/c

1.7 Colour Qualification and Primary coating Test:

1.7.1 Colour Qualification Test:

a) MEK Rub Test (Methyle Ethyl Ketone):

To be tested by using soaked (Solvent) tissue paper for ten strokes unidirectional on 10 cm length of fibre. No colour traces shall be observed on the tissue paper after testing.

b) Water immersion Test (Type Test):

To be tested for coloured fibre for 30 days. After the test Colour qualification, attenuation measurement & stripability test are to be taken.

1.7.2 Primary coating Test (Type Test):

a) Fourier Transform Infrared Spectroscopy (FTIR) Test:

To be tested to check the curing level of coating on the surface of natural fibre. The curing level shall be better than 90%.

b) Adhesion Test:

To be tested by using soaked (Solvent) tissue paper for ten strokes unidirectional on 10 cm length of fibre. No coating shall be observed on the tissue paper after testing.