



RailTel Corporation of India Ltd.  
Plate-A, 6th Floor, Office Block-2,  
NBCC Building, East Kidwai Nagar, New Delhi-110023  
T: 011-22900600, F : 011-22900699

रेलटेल कॉर्पोरेशन ऑफ इंडिया लिमिटेड  
(भारत सरकार का एक उपक्रम)

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

BharatNet Project/Gujarat के लिए 453 KM 24 Fibre Metal Free Optical Fibre Cable with double HDPE Sheath (G.652D) की सप्लाई हेतु ई-निविदा.

**ELECTRONIC TENDER DOCUMENT (Open Tender)**

**E-bids for the supply of 453 KM, 24 Fibre Metal Free Optical Fibre Cable with double HDPE Sheath (G.652D) for BharatNet Project/Gujarat.**

**E-TENDER NO. RAILTEL/TENDER/OT/CO/OP/2019-20/Metal Free OFC/NOFN/501 dtd:  
08.11.19**

**Due for Opening on 05.12.2019 at 15.30 hrs.**

**CIN-U64202DL2000GOI107905**



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रेलटेल कॉर्पोरेशन ऑफ इंडिया लिमिटेड (रेलटेल) की ओर से TAC/TSEC approved निर्माताओं से BharatNet Project/Gujarat के लिए 453 KM 24 Fibre Metal Free Optical Fibre Cable with double HDPE Sheath (G.652D) single पैकेट प्रणाली में शामिल होने के लिए E- निविदा आमंत्रित की जाती है। इच्छुक निविदाकर्ता निविदाये नीचे दिए गए नियम व कार्यक्रम के अनुसार जमा करें।

**(खुली निविदा)**

a)	निविदा downloading की शुरुआती तिथि	13.11.2019
b)	E-निविदा दस्तावेजों की प्रस्तुति	05.12.2019 up-to 1500 hrs.( Online)
c)	E-निविदा दस्तावेजों को खोला जाना	05.12.2019 at 1530 hrs.(Online)
d)	सप्लाई का अनुमानित मूल्य	रु. 2.26 Crore
e)	धरोहर राशि (ईएमडी)#	रु. 4.53 लाख
f)	निविदा दस्तावेज की कीमत#	रु. 2950 (सर्व समावेशी)

# योग्य MSEs को निविदा दस्तावेज और धरोहर राशि का मूल्य जमा कराने से छूट दी जाती है।

नोट:- निविदा सूचना और निविदा दस्तावेज वेबसाइट [www.railtelindia.com](http://www.railtelindia.com) तथा e-Tendering Portal <https://www.ireps.gov.in> पर उपलब्ध रहेंगे जिसे निविदाकर्ता डाउनलोड कर सकते हैं लेकिन निविदा केवल इ-टेंडरिंग द्वारा e-Tendering portal <https://www.ireps.gov.in> पर ONLINE ही स्वीकार की जाएगी। निविदाकर्ता को E-निविदा जमा कराने के लिए <https://www.ireps.gov.in> से एक अधिकृत इ-दस्तावेज डाउनलोड करना आवश्यक है। Corrigendum /addendum /amendments सम्बंधित जानकारी केवल e-Tendering portal <https://www.ireps.gov.in> पर ही उपलब्ध होंगी। निविदा दस्तावेज की छपी हुई प्रति बिक्री के लिए उपलब्ध नहीं होगी।

कार्यकारी निदेशक /परिचालन



RailTel Corporation of India Ltd.  
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T: 011-22900600, F : 011-22900699

**E-TENDER NO. RAILTEL/TENDER/OT/CO/OP/2019-20/Metal Free OFC/NOFN/501 dtd: 08.11.19**

RailTel Corporation of India Ltd. (RailTel) invites e-Tenders from the TAC/TSEC approved sources, for the supply of **453** KM 24 Fibre Metal Free Optical Fibre Cable with double HDPE Sheath (G.652D) for BharatNet Project/Gujarat.

**(Open Tender)**

a)	Opening date of Tender downloading	13.11.2019
b)	Submission date of e bids	05.12.2019 up-to 1500 hrs.( Online)
c)	Opening of e bids	05.12.2019 at 1530 hrs.(Online)
d)	Approx. value of supplies	Rs. 2.26 crore
e)	Earnest Money (EMD) #	Rs.4.53 Lakhs
f)	Cost of Tender Document #	Rs. 2950 (all inclusive)

# Eligible MSEs are exempted from cost of Tender Documents and EMD.

Note: Tender Notice and Tender Document are available on RailTel's website and can be downloaded from [www.railtelindia.com](http://www.railtelindia.com) or from the **e-Tendering Portal** <https://www.ireps.gov.in>. For online bid submission the tenderer will have to necessarily download an official online copy of the tender documents from e-Tendering Portal <https://www.ireps.gov.in>. All future Information viz. corrigendum /addendum/ amendments etc. for this Tender shall be posted on the e-Tendering Portal only. Printed copy of Tender document will not be sold from RailTel office.

**Executive Director/Operations**

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## Chapter-I

### Schedule of Requirements

**Price Schedule of Requirements for Gujarat (To be filled up completely, duly signed & stamped & uploaded on IREPS Website)**

S. No	Item Description	State	Unit	Qty	Unit Basic Price (Rs.)	Packing & Forwarding charges (Rs.)	Freight & Insurance charges (Rs.)	GST @ ____% (Rs.)	Unit Cost CIP destination		Total cost CIP destination	
									In fig. (Rs.)	In words (Rs.)	In fig. (Rs.)	In words (Rs.)
1	24F Metal free Optical Fibre Cable with double HDPE Sheath (G.652D Fiber)	Gujarat	Km	453								

Note: Table is indicative. The rates, quoted on IREPS portal will be taken as base. Successful bidder needs to provide the rate break up as per above Table.

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Table for state wise transportation of OFC &amp; Accessories

S.No	State	GST @..... %	Freight & Insurance charges in Rs /per KM
1	J&K		
2	Himachal Pradesh		
3	Haryana		
4	Punjab		
5	Chandigarh		
6	Delhi		
7	Rajasthan		
8	Uttar Pradesh		
9	Uttarakhand		
10	Madhya Pradesh		
11	Maharashtra		
12	GOA		
13	Gujarat	xxxxxxxxxx	xxxxxxxxxxxxxx
14	Andhra Pradesh		
15	Telangana		
16	Orissa		
17	Karnataka		
18	Tamilnadu		
19	Kerala		
20	Jharkhand		
21	Chhattisgarh		
22	Bihar		
23	West Bengal		
24	Assam		
25	Mizoram		
26	Manipur		
27	Tripura		
28	Meghalaya		
29	Nagaland		
30	Arunachal Pradesh		
31	Daman & Diu		
32	Dadar & Nagar Haveli		

## CHAPTER 2

### BID DATA SHEET

Reference	Description
Schedule of Requirement Chapter – 1	<b>Name of work</b> supply of 453 KM, 24 Fibre Metal Free Optical Fibre Cable with double HDPE Sheath (G.652D) for BharatNet Project/Gujarat.
Tender notice	<b>Last date of submission (online)</b> Date: 05.12.2019 Time: 15:00 Hrs.  <b>Date of opening of tender( online)</b> Date : 05.12.2019 Time: 15:30 Hrs  Public Online Tender Opening Event (TOE) through e-Tendering portal of IREPS.
Special Tender Condition Clause – 3.3 Chapter 3	<b>3.2 ELIGIBILITY CRITERIA:</b>  <b>3.3.1</b> The bidders should be Indian Companies registered to manufacture the tendered item in India and have obtained clearance from Reserve Bank of India, wherever applicable. In addition, they should meet the following criteria: The Bidders should:  <b>3.3.1.1</b> have got Type Approval Certificate (TAC) from Telecom Engineering Centre (TEC), New Delhi or Technical Specification Evaluation Certificate (TSEC) from Quality Assurance Circle, BSNL, Bengaluru, against the technical specification of 24 fibres Optical Fibre Cable (24F OFC) mentioned in Chapter 4 of this document  or  TSEC obtained against BSNL tender no.CA/CNP/24F OFC/T-498/2015 dated 20.01.2015 with matching technical specification or BBNL tender no. BBNL/MM/2013/001 dated 03.04.2013 or BBNL tender no. BBNL/MM/OFC/2017/002 dated 20.03.2017 will be acceptable to meet eligibility criteria. Validation/renewal of this TSEC shall be

obtained for the current tender by successful bidder within one month from the date of issuance of APO. SPOs will be issued after that.

or

have applied for TSEC in QF-103 form to Quality Assurance Circle, BSNL, Bengaluru or in form – B to TEC New Delhi for their product against the technical specifications of 24F OFC mentioned in chapter 4 of this document at least one day before the opening of the tender. The registration no. allotted for the TSEC purpose by QA Circle BSNL Bengaluru or for TAC purpose by TEC New Delhi shall be submitted along with the bill. However, only type approved OFC as per above specifications will be accepted, which will have to be obtained before commencing supplies by the bidder.

**3.3.1.2** have executed Commercial order(s) issued by DOT/ BSNL/ MTNL/ State Government/ PSUs/Telecom Service Providers for the OF Cable (24 Fibre and above) for a minimum total quantity of 1000 Route Km during the last three (3) financial years i.e.2016-17, 2017-18 and 2018-19 (till the last date of submission of bid). The bidders shall submit certificate(s) from the end user(s) for the satisfactory working/ performance of the OF Cable supplied by them for the quantities required under this clause.

**3.3.2** Full quantity i.e. 100% of the Optical Fibre Cable and accessories to be supplied against this tender shall be domestically manufactured and the minimum domestic Value Addition (VA) to qualify as Domestically Manufactured Telecom Product shall be 50% for the financial year 2018-19. The formula for calculation of Value Addition for telecom products shall be as notified by the Department of Electronics and Information Technology from time to time. The bidder shall submit a self-certification certifying that the domestic Value Addition in the OF Cable and accessories being supplied to RailTel is 50% or more.

**3.3.3** The bidders shall submit necessary documentary proof showing that they meet the eligibility criteria along with



	their tender bid. All documents submitted will also be self-attested.
Instructions to Tenderers Clause – 6.4 Chapter 6	<b>Earnest money</b> –Rs. 4,53,000/- (Rupees Four Lakhs Fifty Three Thousand only) through IREPS portal.
Instructions to Tenderers Clause – 6.16 Chapter 6	Validity of offer 90 days (Ninety days only) from the date of opening of tender.
Instructions to Tenderers Clause – 6.11.5 Chapter 6	<b>Unit Price:</b> Tenderer should submit firm price offer. Price quoted by the bidder shall remain fixed during the entire period of contract. The offer shall be firm in Indian Rupees. No Foreign exchange will be made available by the purchaser.
Instructions to Tenderers Clause – 6.25.3, Chapter 6	<b>Power of Attorney:</b> To be deposited in RailTel Office. For more details see Chapter 2-A, item 6 Each and every page of bid & tender document should be marked with numerical numbers and signed by authorized Representative of the firm. Power of attorney in favour of the signatory duly authorizing the signatory shall be enclosed in The bid. Page number of documents submitted in their offer must be given in the Check list in Chapter-10 of tender document. (scanned copy to be uploaded on IRePS portal)
Special Tender condition Clause – 3.4, Chapter 3	<b>Issue of Advance Purchase Order &amp; Supply Orders</b> The validity of the Advance Purchase Order will be 12 months from date of issue.
Special Tender condition Clause – 3.2, Chapter 3	<b>Delivery Period</b> Material is required to be delivered by the supplier to the consignee within 75 days of placement of supply order/Sub Purchase Order against Advance Purchase order.
General Tender condition Clause –6.5.1, Chapter 6	<b>Performance Bank Guarantee</b>  i) Performance Bank Guarantee of 2.5% of total value of the stores is required to be submitted and should be valid for 33 months (12 +18+3) * from the date of issue of APO to cover Validity of Advance Purchase Order, delivery period and Warranty period.  ii) Performance Bank Guarantee of 7.5 % of Sub PO value of the stores is required to be submitted with validity 3 months beyond warranty period of supply.
Special Tender condition Clause – 8.28.0, Chapter 8	<b>Warranty:</b> The OFC is to be warranted for 18 months from date of delivery

Special Tender condition Clause – 3.5 Chapter 3	<b>Bill passing &amp; paying Authority:</b> <b>Executive Director/Regional General Manager</b> <b>(Concerned Region)</b>
<b>Consignee address</b>	RailTel Corporation of India Ltd (address of RailTel Store to be advised by concerned RailTel Region.)
<b>Billing Address</b>	Will be given at the time of Issue of Purchase Order.
Instructions to Tenderers Clause – 6.25.4 Chapter 6	<b>Authority and Address</b> Executive Director/Operations Plate-A, 6th Floor, Office Block-2, NBCC Building, East Kidwai Nagar, New Delhi-110023 T: 011-22900600, F : 011-22900699
<b>Venue for Bid submission and opening</b>	RailTel Corporation of India Ltd. Plate-A, 6th Floor, Office Block-2, NBCC Building, East Kidwai Nagar, New Delhi-110023 T: 011-22900600, F : 011-22900699

\* 12 months APO validity, 18 months warranty, 3 months extra.

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## Chapter - 2-A

### E-tendering Instructions to Bidders

#### **General**

These Special Instructions (for e-Tendering) supplement 'Instruction to Bidders', as enclosed in Chapter- 6 of the Tender Document.

Submission of Bids only through online process is mandatory for this Tender.

E-Tendering is a new methodology for conducting Public Procurement in a transparent and secured manner. Now, the Government of India has made e-tendering mandatory. Suppliers/ Vendors will be the biggest beneficiaries of this new system of procurement. For conducting electronic tendering, RailTel has decided to use the portal <https://www.ireps.gov.in> Indian Railways E-Procurement system (IREPS).

Benefits to Suppliers are outlined on the Home-page of the portal. Bidders are advised to visit the IREPS Portal for details related to E-Tender i.e. Registration, FAQ, Helpdesk, Learning Center etc.

#### **1. Tender Bidding Methodology:**

Sealed Bid System - 'Single Stage - Single Envelope': In this, bidder has to submit both Technical and Financial bid in single envelope "ONLINE."

#### **IREPS Helpdesk**

**Please visit Helpdesk section on IREPS Portal.**

#### **RailTel Contact-I (for general Information)**

RailTel's Contact Person /Design.  
Nitin Kumar Hundet, DGM/ Operation  
Telephone/ Mobile 9717644466  
E-mail ID [nitinhundet@railtelindia.com](mailto:nitinhundet@railtelindia.com)

#### **RailTel Contact-II (for general Information)**

RailTel's Contact officer  
Jagdeep Singh, ED/Operations  
Telephone/ Mobile: 9779244100  
E-mail ID: [jagdeep@railtelindia.com](mailto:jagdeep@railtelindia.com)

#### **2. Bid related Information for this Tender (Sealed Bid)**

The entire bid-submission would be online on IREPS Portal.

Broad outline of submissions are as follows:

1. Submission of Bid Security/ Earnest Money Deposit (EMD)
2. Submission of digitally signed copy of Tender Documents/Addenda
3. Two Packet (Part I –Credential/ Techno commercial Bid and Part II - Price Bid)
4. Online response to Terms & Conditions of Tender.
5. (Optional) Online Submission of modification, substitution bids for technical or financial parts, or withdrawal bid.

**NOTE: Bidder must ensure that the bid must be successfully submitted online as per instructions of IREPS Portal.**

### **3. Offline Submissions:**

The bidder is required to submit the following documents offline to RailTel Corporation of India Ltd., Plate-A, 6th Floor, Office Block-2, NBCC Building, East Kidwai Nagar, New Delhi-110023 before due date & time of submission of bids specified in covering letter of this tender document, in a Sealed Envelope. The envelope shall bear (the tender name), the tender number and the words 'DO NOT OPEN BEFORE' (due date & time).

- a) EMD submission **through IREPS portal.**
- b) Tender Cost submission **through IREPS portal.**
- c) Power of attorney to be submitted in accordance with Clause – 6.25.3, Chapter 6, also see chapter 2-A, item 6

**NOTE: The Bidder has to upload the Scanned copy of all above original documents as Bid-Annexures during Online Bid-Submission.**

### **4. Submission of Eligibility Criteria related documents**

Eligibility criteria related documents as applicable shall also be scanned and submitted ON LINE

NOTE: In case of internet related problem at a bidder's end, especially during 'critical events' such as - a short period before bid-submission deadline, during online public tender opening event, during e-auction, it is the bidder's responsibility to have backup internet connections.

In case there is a problem at the e-procurement/ e-auction service provider's end (in the server, leased line, etc.) due to which all the bidders face a problem during critical events, and this is brought to the notice of RailTel by the bidders in time, then RailTel will promptly re-schedule the affected event(s).

### **5. Instructions for Tender Document TO THE BIDDERS**

The RailTel Tenders are published on [www.railtelindia.com](http://www.railtelindia.com) and on IREPS Portal <https://www.ireps.gov.in/>. In addition to submitting the e Tender documents online,

they should also submit cost of tender document through IREPS.

NOTE: For online bid submission the bidder will have to necessarily download an official online copy of the tender documents from IREPS portal, and this should be done well before the deadline for bid-submission.

#### **6.Submission of Offers and Filling of Tender:**

This e-tender should be duly submitted online using the e-Procurement Portal <https://www.ireps.gov.in/>. For detailed instructions please refer to IREPS Portal.

#### **7. Fax Quotations & Late Tenders:**

Fax Tender documents and Late/Delayed tenders would not be considered.

#### **8. Attendance of Representatives for Tender Opening:**

Representatives of bidders desirous to attend the tender opening can do so on production of a proper letter of authority from the respective firm, failing which they may not be allowed to attend the tender opening. Authorized representatives of those firms who have submitted the tender documents alone shall be allowed to attend the tender opening.

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## Chapter 3

### SPECIAL TENDER CONDITIONS

- 3.1.** The Tenderer shall quote Total all Inclusive Rate on C.I.P. destination basis clearly indicating the breakup of rates, applicable duties and taxes, etc. as detailed in the offer form. Freight and Insurance charges have to be quoted for each state/UT of India.

The Tenderers shall also quote taxes, freight and insurance charges state wise as per Annexure-1, as the material may be subsequently required to be diverted to these states.

**3.3 Delivery Period: -**

Material is required to be delivered by the supplier to the consignee within 75 days of placement of supply order/Sub Purchase Order against Advance Purchase order

**3.4 ELIGIBILITY CRITERIA:**

- 3.3.1** The bidders should be Indian Companies registered to manufacture the tendered item in India and have obtained clearance from Reserve Bank of India, wherever applicable. In addition, they should meet the following criteria: The Bidders should:

- 3.3.1.1** have got Type Approval Certificate (TAC) from Telecom Engineering Centre (TEC), New Delhi or Technical Specification Evaluation Certificate (TSEC) from Quality Assurance Circle, BSNL, Bengaluru, against the technical specification of 24 fibres Optical Fibre Cable (24F OFC) mentioned in Chapter 4 of this document

or

TSEC obtained against BSNL tender no.CA/CNP/24F OFC/T-498/2015 dated 20.01.2015 with matching technical specification or BBNL tender no. BBNL/MM/2013/001 dated 03.04.2013 or BBNL tender no. BBNL/MM/OFC/2017/002 dated 20.03.2017 will be acceptable to meet eligibility criteria. Validation/renewal of this TSEC shall be obtained for the current tender by successful bidder within one month from the date of issuance of APO. SPOs will be issued after that.

or

have applied for TSEC in QF-103 form to Quality Assurance Circle, BSNL, Bengaluru or in form – B to TEC New Delhi for their product against the technical specifications of 24F OFC mentioned in chapter 4 of this document at least one day before the opening of the tender. The registration no. allotted for the TSEC purpose by QA Circle BSNL Bengaluru or for TAC purpose by TEC New Delhi shall be submitted along with the bill. However, only type approved OFC as per

above specifications will be accepted, which will have to be obtained before commencing supplies by the bidder.

**3.3.3.2** have executed Commercial order(s) issued by DOT/ BSNL/ MTNL/ State Government/ PSUs/Telecom Service Providers for the OF Cable (24 Fibre and above) for a minimum total quantity of 1,000 Route Km during the last three (3) financial years i.e.2016-17, 2017-18 and 2018-19 (till the last date of submission of bid). The bidders shall submit certificate(s) from the end user(s) for the satisfactory working/ performance of the OF Cable supplied by them for the quantities required under this clause.

**3.3.4** Full quantity i.e. 100% of the Optical Fibre Cable and accessories to be supplied against this tender shall be domestically manufactured and the minimum domestic Value Addition (VA) to qualify as Domestically Manufactured Telecom Product shall be 50% for the financial year 2018-19. The formula for calculation of Value Addition for telecom products shall be as notified by the Department of Electronics and Information Technology from time to time. The bidder shall submit a self-certification certifying that the domestic Value Addition in the OF Cable and accessories being supplied to RailTel is 50% or more.

**3.3.5** The bidders shall submit necessary documentary proof showing that they meet the eligibility criteria along with their tender bid. All documents submitted will also be self-attested.

#### **3.4 Issue of Advance Purchase Order and Supply Orders.**

**3.4.1** The quantities of items indicated in the schedule of Requirements, are indicative. Purchaser will issue an Advance Purchase Order to the successful bidder for the quantities indicated in Schedule of Requirements. This Advance Purchase Order would be valid as per bid data sheet of chapter 2. Depending on the actual requirement at different locations at different times, Purchaser will issue Supply Orders within total quantity of Advance PO. The supplier will have to honor all the supply orders issued within the currency of Advance PO and complete the supplies within the contracted delivery period. (The Consignee locations and address should be mentioned in the SOR).

**3.4.2** The issue of Advance purchase order in favour of the successful bidder shall constitute the intention of the purchaser to enter into contract with the bidder. The bidder shall have to furnish the acceptance along with security deposit within 15 days of issue of Advance P.O.

**3.5 Bill passing & Paying Authority: -**  
Bills will be passed & paid by the Regional Offices under whose jurisdiction consignee is located.

#### **3.6 SPLITTING OF QUANTITY-**



The quantity to be ordered will be split by the Purchaser amongst various tenderers for ensuring better availability of material keeping in view the vital/critical nature of item, quantity to be procured, price and past performance of the firms with following condition:

If the ordered quantity of the consignee is less than 100 Kms, there will be no splitting of quantity.

### **3.6.1 CRITERIA FOR SPLITTING OF TENDER QUANTITY:**

The following splitting criteria will be applicable: -

Purchaser would distribute the procurable quantity on three eligible tenderers as per the following formula.

Such distribution/splitting of the tendered/procurable quantity and the quantity distribution will depend upon the differential of rates quoted by the tenderers in the manner detailed below:-

Price differential between Eligible L1 and L2	Quantity distribution ratio between Eligible L1 and L2
Up to 3%	60: 40
More than 3% and up to 5%	65:35
More than 5%	Distribution shall be as per para 3.6.1.1

**3.6.1.1** If difference between Eligible L-1 & L-2 is more than 5%, splitting of the quantity is required to be done by ordering on tenderers higher than the Eligible L1 & L2 tenderer, then the quantity distribution proportion amongst the tenderers will be L1:L2:L3::70:20:10.

**3.6.1.2** While distributing as above, the purchaser shall offer the lowest acceptable rate for bulk ordering to the higher tenderer(s). In the event of rejection of such counter offer(s), the purchaser shall further decide on the placement of order as detailed below:

If Eligible L-1 or L-2 or L-3 tenderer does not accept the offer/counter offer, the calculation will be as per the case which is described below-

- a). If L3 does not accept the counter offer, the quantity allotted to him shall be redistributed additionally between L-1 & L-2 again as per formula given – Quantity in % of L-1 x Quantity in % of L-3/ Quantity in % of total of L1+L2.
- b). If L2 does not accept the counter offer, the quantity allotted to him shall be redistributed additionally between L-1 & L-3 again as per formula given – Quantity in % of L-1 x Quantity in % of L-2/ Quantity in % of total of L1+L3.
- c). If L1 does not accept the offer, the tender will be discharged.

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## **Chapter 4**

### **Special (Technical) Conditions of Contract and Technical Specifications**

#### **IV.C.1. Quality Assurance and Testing:**

- (i) The optical fibre cable will be inspected and tested by BSNL as per the technical specifications given in this chapter.
- (ii) The supply will be accepted only after Quality Assurance tests are carried out by BSNL Quality Assurance Wings as per prescribed schedule.
- (iii) Only the Supplies made in full, "as per purchase order", during delivery period will be deemed to have been supplied within the scheduled delivery period.
- (iv) In case of any Quality issue, manufacturers would have to replace the defective material, in full, by good material duly passed by QA.

IV.C.2. The bidders would be required to quote for all the SOR items for a particular state. The bid may be rejected if not quoted accordingly.

IV.C.3 Deleted

IV.C.4. The OFC will be supplied as per the distributed quantities to each ultimate consignee which will be intimated at the time of APO/ PO. The exact length of the optical fibre cable to the ultimate Consignee should ideally be as specified. However, the quantity supplied shall not be in excess or deficit by at most 1 Km at each consignee for each PO which will include cumulative total of all supplies against the PO. Any variation in quantities beyond 1 Km shall not be acceptable.

IV.C.5. The OFC length in a drum shall be 2 Km  $\pm 10$  %. The payments will be made on the actual supplied length.

IV.C.6. OFC drums with short length of up to 500 Mts (max) from standard length i.e. 2KM per drum shall be permitted against maximum 5% of total supply for each consignee against the P.O. on a cumulative basis.

IV.C.7. Consignee delivery requirement shall be given in multiples of standard length (i.e. 2 Kms). Any consignee delivery length specifically mentioned by the purchaser shall be considered as the standard length.

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# **Technical Specifications for Metal Free Optical Fibre Cable with Double HDPE Sheath and Glass Yarn Armouring (G.652D)**

## **PART I – TECHNICAL SPECIFICATIONS**

### **1.0 Introduction:**

This document describes the requirements of Metal free Optical fibre cable for underground installation in ducts. The cable shall have double HDPE jacketing anti-rodent & anti-termite with glass yarn in between as reinforcement. The optical fibre cable shall be suitably protected for the ingress of moisture by Flooding Jelly /WS yarn and WS tape. The raw material used in the cable shall meet the requirements as specified in the TEC GR for raw materials (GR No. TEC/GR/TX/ORM-01/04 SEP-09).

### **2.0 Functional Requirement:**

- 2.1 The design and construction of Optical fibre cable shall be inherently robust and rigid under all conditions of installation, operation, adjustment, replacement, storage and transport.
- 2.2 The Optical fibre cable shall be able to work in a saline atmosphere in coastal areas and should be protected against corrosion.
- 2.3 Life of cable shall be at least 25 years. Necessary statistical calculations shall be submitted by the manufacturer, based upon life of the fibre and other component parts of the cable. The cable shall meet the cable aging test requirement.
- 2.4 It shall be possible to operate and handle the Optical fibre cable with tools as per GR No. GR/OFT-01/03 APR 2006 and subsequent amendment, if any. If any special tool is required for operating and handling the optical fibre cable the same shall be provided along with the cable.
- 2.5 The Optical fibre cable supplied shall be suitable and compatible to match with the dimensions, fixing, terminating & splicing arrangement of the splice closure. The cable supplied shall also meet other requirement of splice closure (GR No. TEC/GR/TX/OJC-002/03/APR-2010) and subsequent amendments, if any.
- 2.6 The manufacturer shall submit an undertaking that the optical and mechanical fibre characteristics shall not change during the lifetime of the cable against the manufacturing defects.
- 2.7 It is mandatory that Optical Fibre Cable supplied in an offered lot is

manufactured from a single source of optical fibres.

- 2.8 The Optical fibre cable shall be manufactured so as to protect the cable from rodent and termite. The rodent resistance is an important requirement for the cable. The manufacturer shall give an undertaking to this effect.

### 3.0 Technical Requirements of Optical Fibres:

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

- 3.1 Type of fibre : Single mode (Section -I of the GR No. TEC/GR/TX/ORM-01/04/SEP-09 and subsequent amendments, if any)  
(Wavelength band optimized nominal 1310 nm)

### 3.2 Geometrical Characteristics:

- 3.2.1 MFD : 8.8-9.8  $\mu\text{m}$   
3.2.2 Cladding Diameter : 125  $\mu\text{m} \pm 1.0 \mu\text{m}$   
3.2.3 Cladding Non-circularity :  $\leq 1\%$   
3.2.4 Core Clad concentricity error :  $\leq 0.6 \mu\text{m}$   
3.2.5 Diameter over primary coated with double UV cured acrylate. : 245  $\mu\text{m} \pm 10 \mu\text{m}$   
(Shall be measured on un coloured 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 un coloured fibres) other than the on line integrated colouring process (of secondary layer of primary coating) of the fibres, during fibre manufacturing.

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

### 3.3 Transmission Characteristics:

#### 3.3.1 Attenuation:

- a) Fibre attenuation before cabling
- i). At 1310 nm :  $\leq 0.34$  dB/Km
  - ii). Between 1285 to 1380 nm :  $\leq 0.37$  dB/Km
  - iii). Between 1390 to 1525 nm :  $\leq$  Value at 1310 nm
  - iv). At 1550 nm :  $\leq 0.21$  dB/Km
  - v). Between 1525 to 1625 nm :  $\leq 0.24$  dB/Km

- b) Water Peak Attenuation before cabling between 1380-1390 nm :  $\leq$  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.
4. The Spectral attenuation in the 1250 nm–1625 nm band shall be measured at an interval of 10nm and the test results shall be submitted.

- c) Fibre attenuation after cabling
- i) At 1310 nm :  $\leq 0.36$  dB/km
  - ii) At 1550 nm :  $\leq 0.23$  dB/Km
  - iii) At 1625 nm :  $\leq 0.26$  dB/Km

- d) Water Peak Attenuation after cabling  
At 1383nm  $\pm$  3nm :  $\leq$  Value at 1310 nm

**3.3.2 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 on un-cabled fibre at an interval of 10nm and the test results shall be submitted.

- b) Polarization mode dispersion at 1310 & 1550 nm
- i) Fibre :  $\leq 0.2$  ps/ $\sqrt{\text{km}}$
  - ii) Cabled Fibre :  $\leq 0.3$  ps/ $\sqrt{\text{km}}$

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

- c) Zero Dispersion Slope :  $\leq 0.092$  ps/(nm<sup>2</sup> Km)

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

3.3.3 **Cut off wavelength for fibres used in cables** : 1320 nm Max.

**Note:** The above cut off wavelength is w.r.t. 2M sample length of fiber.

3.3.4 **Cable Cut off wavelength** : 1260nm Max.

### 3.4 **Mechanical Characteristics:**

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

3.4.2 Peak Stripability force to remove primary :  $1.3 \leq F \leq 8.9$  N  
coating of the fibre. (Test method IEC-60793-1-32)

Note: The force required to remove  $30 \text{ mm} \pm 3 \text{ mm}$  of the fibre coating shall not exceed 8.9 N and shall not be less than 1.3 N.

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

- a) Un-aged :  $\geq 550$  KPSI (3.80 Gpa)
- b) Aged :  $\geq 440$  KPSI (3.00 Gpa)

3.4.4 Dynamic Fatigue (Test method IEC- 60793 - 1-33) :  $\geq 20$

3.4.5 Static Fatigue (Test method IEC- 60793 - 1-33) :  $\geq 20$

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

- a) Change in attenuation when fiber is coiled with:  $\leq 0.05$  dB at 1550nm  
100 turns on  $30 \pm 1.0$  mm radius mandrel :  $\leq 0.5$  dB at 1625nm
- b) Change in attenuation when fiber is coiled with:  $\leq 0.5$  dB at 1550nm  
1 turn around  $32 \pm 0.5$  mm diameter mandrel:  $\leq 1.0$  dB at 1625nm

3.4.7 Fibre Curl :  $\geq 4$  meters radius of curvature  
(Test method as per IEC 60793-1-34)

### 3.5 **Material Properties:**

3.5.1 Fibre Materials:

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

b) Protective material requirement:

- (i) The physical and chemical properties of the material used for the fibre primary fibre coating and for single jacket fibre. : It shall meet the requirement of fibre coating stripping force as per clause No. 3.4.2
- (ii) The best way of removing protective coating material. : To be indicated by the manufacturer

c) Group refractive Index of fibre manufacturer

: To be indicated by the

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

### 3.6 Environmental Characteristic of Fibre (Type test):

#### 3.6.1 Operating Temperature

(Test Method IEC – 60793 – 1-52)

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

Induced Attenuation at 1550 nm at -60°C to +85°C:  $\leq 0.05$  dB/km

#### 3.6.2 Temperature – Humidity Cycling

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

Induced Attenuation at 1550 nm at -10°C to +85°C:  $\leq 0.05$  dB/km and 95% relative humidity.

#### 3.6.3 Water Immersion 23°C

(Test method IEC- 60793 – 1 -53)

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

#### 3.6.4 Accelerated Aging (Temperature ) 85°C

(Test method IEC- 60793 – 1- 51)

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

#### 3.6.5 Retention of Coating Color

(Test method IEC- 60793 – 1 - 51)

Coated Fiber shall show no discernible change in color, when aged for relative humidity. : 30 days at 85°C with 95% Humidity and 20 days in 85°C dry heat.

### 3.7 Colour Qualification and Primary coating Test:

#### 3.7.1 Colour Qualification Test:

##### a) MEK Rub Test (Methyle Ethyl Ketone Test):

To be tested by using soaked (Solvent) tissue paper for ten strikes 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 fiber for 30 days. After the test colour qualification, attenuation measurement & strippability test are to be taken.

### 3.7.2 Primary coating 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%.

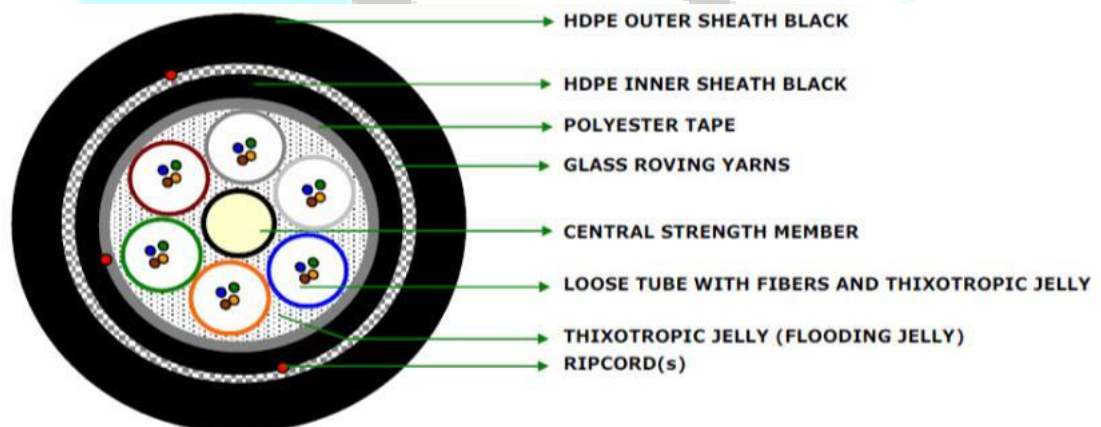
#### b) Adhesion Test:

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.

### 3.8 Optical Fibre Cable Construction Specifications for Wet core (Type-I) which will be procured through this tender:

**General:** The Metal Free optical fibre cable shall be designed to the parameters mentioned in Annexure-I. The manufacturer shall submit designed calculations and the same shall be studied and checked.

#### TYPICAL STRUCTURAL DRAWING FOR 24 FIBRE OF WET CORE CABLE



**3.8.1 Secondary Protection:** The primary coated fibres may be protected by loose packaging within tube, which shall be filled with thixotropic jelly. The dimensions of tube shall be as per Annexure-I.

**3.8.2 Number of fibres in cable:** 24

**3.8.3 Strength Member:** Solid FRP non - metallic strength member shall be used in the center of the cable core. The strength member in the cable shall be for strength and flexibility of the cable and shall have anti buckling properties. The FRP shall keep the fibre strain within permissible values. The size of FRP shall be as per Annexure – I.



**3.8.4 Cable Core Assembly:** Primary coated fibres in loose tubes stranded together around a central strength member using helical or reverse lay techniques shall form the cable core. The dimensions of FRP and stranding pitch shall be as per annexure - I.

**3.8.5 Core Wrapping:** The main cable core containing fibres shall be wrapped by a layer / layers of Polyester foil/ tape. The nylon/polyester binder thread shall be used to hold the tape, if required. The core wrapping shall not adhere to the secondary fibre coating and shall not leave any kink marks over the loose tube.

**3.8.6 Moisture barrier (protection):** The main cable core (containing fibres & core wrapping) shall be protected by thixotropic flooding compound (jelly) having properties of non hygroscopic dielectric material.

**3.8.7 Filling and Flooding compound:** The filling/flooding compound used in the loose tube and in the cable core shall be compatible to fibre, secondary protection of fibre, core wrapping and other component part of the cable. The drip point shall not be lower than +70°C. The fibre movement shall not be constrained by stickiness & shall be removable easily for splicing. Reference test method to measure drop point shall be as per ASTM D 566. The thixotropic filling/flooding compound (jelly) shall be as per the GR No. TEC/GR/TX/ORM-01/04/SEP-09 and subsequent amendment issued, if any.

**3.8.8 Inner Sheath:** A non-metallic moisture barrier sheath may be applied over and above the cable core. The core shall be covered with tough weather resistant High Density Polyethylene (HDPE) sheath, black in colour (UV Stabilized) and colour shall conform to Munsell colour standards. Thickness of the sheath shall be uniform & shall not be less than **1.2 mm**. The sheath shall be circular, smooth, free from pin holes, joints, mended pieces and other defects. Reference test method to measure thickness shall be as per IEC 189 para 2.2.1 and para 2.2.2.

**Note:** HDPE material, black in colour, from the finished cable shall be subjected to following tests (on sample basis) and shall confirm to the requirement of the material as per GR No. TEC/GR/TX/ORM-01/04 SEP.09.

- i) Density
- ii) Melt flow index
- iii) Oxidative Induction time
- iv) Carbon black content
- v) Carbon black dispersion
- vi) ESCR
- vii) Moisture content
- viii) Tensile strength and elongation at break



- ix) Absorption Coefficient
- x) Brittleness Temperature

**3.8.9 Glass Reinforcement:** Impregnated Glass Fibre Reinforcement are used to achieve the required tensile strength of the optic fibre cables over the cable inner sheath to provide peripheral reinforcement along with Solid Rigid FRP Rod in the centre at cable core. These flexible strength members shall be **Non-water blocking type**. The use of Solid Rigid FRP Rod(s) is mandatory in Optical Fibre cable design. Impregnated Colour Coated Glass Fibre Reinforcement used shall be equally distributed over the periphery of the cable inner sheath. It shall be applied **helically** and shall provide full coverage to inner sheath to provide rodent protection. The quantity of the Impregnated Glass fibre Reinforcement used 20 Kg per km length of the cable along with its dimensions shall be as per Annexure-I. The specification of the glass roving shall be as per Section XII of GR No. TEC/GR/TX/ORM-01/04 SEP.09 and as per other details given in the Annexure –I.

**3.8.10 Outer Sheath:** A non-metallic moisture barrier sheath (black in colour) shall be applied over the inner sheath, which shall consist of tough weather resistant made High Density Polyethylene compound (HDPE) which is Anti-termite. The outer sheath shall be UV stabilized and the colour shall confirm to Munsell colour standards. The thickness of the outer sheath shall not be less than **1.6mm**. The outer sheath shall be uniform, circular, smooth, free from pin holes, joints mended pieces and other defects. The reference test method to measure thickness shall be as per IEC 811-5-1. Anti termite dopant shall be added in the outer sheath to resist termite attack on the cable.

**Note:** HDPE material from finished product shall be subjected to following tests (on sample basis) and shall confirm to the requirement of the material as per the GR no. TEC/GR/TX/ORM-01/04/SEP-09 (Section-III):

- i) Density
- ii) Melt flow index
- iii) Oxidative Induction time
- iv) Carbon black content
- v) Carbon black dispersion
- vi) ESCR
- vii) Moisture content
- viii) Tensile strength and elongation at break
- ix) Absorption Coefficient
- x) Brittleness Temperature

**Note:** The outer jacket of HDPE shall be able to protect the cable from attack by termites.

Manufacturer shall provide the details of doping material used and same shall be verified during bulk testing. The outer sheath shall be termite protected. The surface of the sheath shall be smooth and free of defects such as cracks, blisters, etc. The cable shall be rodent protected. As specified in various clauses of the Technical specifications of the OF cable, it is to be clarified that the HDPE Outer Jacket shall be anti-termite with/without dopants. Addition of dopants for anti-rodent property is optional. The tests as per clause 4.20 shall be carried out as applicable.

**3.8.11 Cable diameter:** The finished cable diameter shall be as per Annexure – I.

**3.8.12 Cable Weight:** The nominal cable weight shall be as per Annexure – I.

**3.8.13 RIP Cord:**

- a) Three suitable ripcords shall be provided in the cable, which shall be used to open both HDPE sheath of the cable. Two ripcords shall be placed diametrically opposite each other below the outer Jacket & one ripcord shall be placed below inner sheath. It shall be capable of consistently slitting the sheath without breaking for a length of 1meter at the installation temperature. The ripcords (3ply & twisted) shall be properly waxed to avoid wicking action and shall not work as water carrier.
- b) The ripcords used in the cable shall be readily distinguishable from any other components utilized in the cable construction.

#### **4.0 Mechanical Characteristics and Tests on Optical Fibre Cable:**

(Note: All observations are to be taken at 1310nm and 1550nm wavelengths)

##### **4.1 Tensile strength Test:**

**Objective:** This measuring method applies to optical fibre cables which are tested at a particular tensile strength in order to examine the behaviour of the attenuation as a function of the load on a cable which may occur during installation.

**Method:** IEC 60794-1-2-E1.

**Test Specs:** The cable shall have sufficient strength to withstand a load of value  $T (N) = 9.81 \times 2.5 W$  Newton or 2670 N whichever is higher (Where W-mass of 1 Km of cable in Kg). The load shall be sustained for 10 minutes and the strain of the fibre monitored.

**Requirement:** The load shall not produce a strain exceeding 0.25% in the fibre and shall not cause any permanent physical and optical damage

to any component of the cable. The attenuation shall be noted before strain and after the release of strain. The change in attenuation of each fibre after the test shall be  $\leq 0.05$  dB both for 1310 nm and 1550 nm wavelength.

#### 4.2 Abrasion Test:

**Objective:** To test the abrasion resistance of the sheath and the marking printed on the surface of the cable.

**Method:** IEC-60794-1-2-E2 or by any other international test method

**Test Specs:** The cable surface shall be abraded with needle (wt. 150 gm) having diameter of 1 mm with 500 grams weight (Total weight more than 650 gms)

No. of cycles	:	100
Duration	:	One minute (Nominal)

**Requirement:** There shall be no perforation & loss of eligibility of the marking on the sheath.

#### 4.3 Crush Test (Compressive Test):

**Objective:** The purpose of this test is to determine the ability of an optical fibre cable to withstand crushing.

**Method:** IEC 60794-1-2-E3.

**Test Specs:** The fibres and component parts of the cable shall not suffer permanent damage when subjected to a compressive load of 2000 Newton applied between the plates of dimension 100 x 100 mm. The load shall be applied for 60 Secs. The attenuation shall be noted before and after the completion of the test.

**Requirement:** The change in attenuation of the fibre after the test shall be  $\leq 0.05$  dB both for 1310 nm and 1550 nm wavelength.

#### 4.4 Impact Test:

**Objective:** The purpose of this test is to determine the ability of an optical fibre cable to withstand impact.

**Method:** IEC 60794-1-2-E4.

**Test Specs:** The cable shall have sufficient strength to withstand an impact caused by a mass weight of 50 Newton, when falls freely from a height of 0.5 meters. The radius R of the surface causing impact shall be 300 mm. 10 such impacts shall be applied at the same place. The attenuation shall be noted before and after the completion of the test.

**Requirement:** The change in attenuation of the fibre after the test shall be  $\leq 0.05\text{dB}$  both for 1310 nm and 1550 nm wavelength.

#### 4.5 Repeated Bending:

**Objective:** The purpose of this test is to determine the ability of an optical fibre cable to withstand repeated bending.

**Method:** IEC 60794-1-2-E6.

**Test Specs:** The cable sample shall be of sufficient length (5 m minimum) to permit radiant power measurements as required by this test. Longer lengths may be used if required.

**Parameters:**

Weight	:	5 Kg
Minimum distance from Pulley centre to holding device	:	216mm
Minimum distance from Wt. to Pulley centre	:	457mm
Pulley Diameter	:	20 D (D - cable diameter)
Angle of Turning	:	90°
No. of cycles	:	30
Time Required for 30 cycles	:	2 min

**Requirement:** During the test no fibre shall break and the attenuation shall be noted before and after the completion of the test. The change in attenuation of the fibre after the test shall be  $\leq 0.05\text{ dB}$  both for 1310 nm and 1550 nm wavelength.

#### 4.6 Torsion Test:

**Objective:** The purpose of this test is to determine the ability of an optical fibre cable to withstand torsion.

**Method:** IEC 60794-1-2-E7.

**Test Specs:** The length of the specimen under test shall be 2 meters and the load shall be 100 N. The sample shall be mounted in the test apparatus with cable clamped in the fixed clamp sufficiently tight to prevent the movement of cable sheath during the test. One end of the cable shall be fixed to the rotating clamp which shall be rotated in a clock wise direction for one turn. The sample shall then be returned to the starting position and then rotated in an anti-clock wise direction for one turn and returned to the starting position. This complete movement constitutes one cycle. The cable shall withstand 10 such complete cycles. The attenuation shall be noted before and after the completion of the test.

**Requirement:** The cable shall be examined physically for any cracks tearing on the outer sheath and for the damage to other component parts of the cable. The twist mark shall not be taken as damage. The change in attenuation of the fibre after the test shall be  $\leq 0.05$  dB both for 1310 nm and 1550 nm wavelength.

#### 4.7 Kink Test:

**Objective:** The purpose of this test is to verify whether kinking of an optical fibre cable results in breakage of any fibre, when a loop is formed of dimension small enough to induce a kink on the sheath.

**Method:** IEC 60794-1-2-E10.

**Test Specs.:** The sample length shall be 10 times the minimum bending radius of the cable. The sample is held in both hands, a loop is made of a bigger diameter and by stretching both the ends of the cable in opposite direction, the loop is made to the minimum bend radius so that no kink shall form. After the cable comes in normal condition, the attenuation reading is taken.

**Requirement:** The kink should disappear after the cable comes in normal condition. The change in attenuation of the fibre after test shall be  $\leq 0.05$  dB both for 1310 nm & 1550 nm wavelength.

#### 4.8 Cable Bend Test:

**Objective:** The purpose of this test is to determine the ability of an optical fibre cable to withstand repeated flexing. The procedure is designed to measure optical transmittance changes and requires

an assessment of any damage occurring to other cable components.

**Method:** IEC 60794-1-2-E11 (Procedure-I).

**Test Specs:** The fibre and the component parts of the cable shall not suffer permanent damage when the cable is repeatedly wrapped and unwrapped 4 complete turns of 10 complete cycles around a mandrel of 20 D, where D is the diameter of the cable. The attenuation shall be noted before and after the completion of the test.

**Requirement:** The change in attenuation of the fibre after the test shall be  $\leq 0.05$  dB both for 1310 nm and 1550 nm wavelength. Sheath shall not show any cracks visible to the naked eye when examined whilst still wrapped on the mandrel.

#### 4.9 Temperature Cycling (Type Test):

**Objective:** To determine the stability behaviour of the attenuation of a cable subjected to temperature changes which may occur during storage, transportation and usage.

**Method:** IEC 794-1-2-F1 (To be tested on Standard cable length & drum i.e 2Km.  $\pm 5\%$ )

**Test Specs:** The permissible temperature range for storage and operation will be from  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ . The rate of change of temperature during the test shall be  $1^{\circ}\text{C}$  per minute approx. The cable shall be subjected to temperature cycling for 12 Hrs. at each temperature as given below:

TA2 temp. :	$- 20^{\circ}\text{C}$
TA1 temp. :	$- 10^{\circ}\text{C}$ .
TB1 temp. :	$+ 60^{\circ}\text{C}$ .
TB2 temp. :	$+ 70^{\circ}\text{C}$ .

The test shall be conducted for 2 cycles at the above temperatures.

**Requirement:** The change in attenuation of the fibre under test shall be  $\leq 0.05$  dB for 1310 nm and 1550 nm wave length respectively for the entire range of temperature.

#### 4.10 Cable aging Test (Type Test):

**Objective:** To check the cable material change dimensionally as the cable ages.

**Method:** At the completion of temperature cycle test, the test cable shall be exposed to  $85 \pm 2$  degree C for 168 hours. The attenuation measurement at 1310 & 1550 nm wave length to be made after stabilization of the test cable at ambient temperature for 24 hours.

**Requirement:** The increase in attenuation allowed:  $\leq 0.05$  dB at 1310 and 1550 nm.

**Note:** The attenuation changes are to be calculated with respect to the base line attenuation values measured at room temperature before temperature cycling.

#### 4.11 Water Penetration Test (Type Test):

**Objective:** The aim of this test is to ensure that installed jelly filled Optical Fibre cable will not allow water passage along its length.

**Method:** IEC 60794-1-2-F5 (Fig. B) 1992.

**Test Specs.** A circumferential portion of the cable end (with inner HDPE sheath) shall face the water head. The water tight sleeve shall be applied over the cable. The cable shall be supported horizontally and two meter head of water, containing a sufficient quantity of water soluble fluorescent dye for the detection of seepage, shall be applied on the inner HDPE sheath for a period of 7 days at ambient temperature. No other coloured dye is permitted.

**Requirement:** No dye shall be detected when the end of the 3m length of the cable is examined with ultraviolet light detector. The cable sample under test shall be ripped open after the test and then it shall be examined for seepage of water into the cable and the distance to be noted. It shall not be more than 20 cm.

#### 4.12 Test of Figure of 8 (Eight) on the cable (Type Test):

**Objective:** Check of easiness in formation of figure of 8 of the cable during installation in the field.

**Test Method:** 1000 meter of the cable shall be uncoiled from the cable reel and shall be arranged in figure of 8 (eight) shape. The diameter



of each loop of the figure of 8 shall be maximum 2 meters.

**Requirement:** It shall be possible to make figure of 8 of minimum 1000 meters of the cable uncoiled from the cable reel without any difficulty. No visible damage shall occur.

#### **4.13 Flexural Rigidity Test on the optical fibre cable (Type Test):**

**Objective:** To check the Flexural Rigidity of the metal free optical fibre cable.

**Method:** To be tested as per ASTM D –790

**Test Specs:** The fibre and the component parts of the cable shall not suffer permanent damage in the cable subjected to Flexural Rigidity Test as per the above method. The attenuation shall be noted after and before the completion of the test.

**Requirement:** The change in attenuation of the fibre after the test shall be  $\leq 0.05$  dB at 1310, 1550 nm and 1625nm wavelengths. The sheath shall not show any cracks visible to the naked eye.

#### **4.14 Static Bend test (Type Test):**

**Objective:** To check the cable under Static bend.

**Method:** As per the clause no 4.8 of the GR alternatively as per ASTM D790.

**Test Specs:** The cable shall be subjected to static bend test. The optical fibre cable shall be bend on a mandrel having a Diameter of 10 D (D is diameter of the cable).

**Requirement:** The change in attenuation of the fibre after the test shall be  $\leq 0.05$  dB for 1310, 1550 nm and 1625nm wavelengths. Sheath shall not show any cracks visible to the naked eye when examined whilst still wrapped on the mandrel.

#### **4.15 Cable Jacket Yield Strength And Ultimate Elongation:**

**Objective:** To determine the yield strength and elongation of the polyethylene (HDPE) cable sheath (jacket).

**Test Method:** FOTP-89 or ASTM 1248 Type III class

**Test Condition:** 1. Sample shall be taken from a completed cable. The aged



sample shall be conditioned at  $100 \pm 2^{\circ}\text{C}$  for 120 hours before testing.

2. The cross-head speed shall be 50 mm per minute.

**Requirement:**

Jacket Material	Minimum Yield Strength		Minimum Elongation (%)
	(MPa)	(psi)	
HDPE un-aged	16.5	2400	400
HDPE aged	12.4	1800	375

**4.16 To Check of the quality of the loose tube (containing optical fibre) (Type Test):**

**a. Embrittlement Test**

This test method is based on bending by compression and reflects embrittlement much better than the other tensile tests. This test is independent of wall thickness of the loose tube.

**Sample:** The minimum length of the test sample depends on the outside diameter of the loose tube and should be 85 mm for tubes up to 2.5 mm outside dia. The length of the bigger tubes should be calculated by using the following equation:

$$L_o > 100 \times \left[ \frac{(D^2 + d^2)^{1/2}}{4} \right]$$

where

$L_o$  = Length of tube under test.

$D$  = Outside dia of loose tube.

$d$  = Inside dia of loose tube.

**Procedure:** Both the ends of a buffer tube test sample may be mounted in a tool, which is clamped in jaws of a tensile machine which exerts a constant rate of movement. The movable jaw may move at a rate of 50 mm per minute toward the fixed jaw. Under load, the tube will bend so that it is subjected to tensile and compressive stresses. The fixture for holding the tube should be designed in a manner that the tube might bend in all directions without further loading.

**Requirement:** The tube should not get embrittled. No kink should appear on the tube up to the safe bend diameter of tube ( $15 D$ ), where  $D$  is the outside diameter of the loose tube. There should also not be any physical damage or mark on the tube surface.

**b. Kink Resistance Test on the Loose Tube**

**Objective:** To safeguard the delicate optical fibers, the quality of the loose tube material should be such that no kink or damage to the tube occur while it is being handled during installation and in splicing operations.

**Procedure:** To check the kink resistance of the loose tube, a longer length of the loose tube is taken (with fiber and gel), a loop is made and loop is reduced to the minimum bend radius of loose tube i.e.  $15 D$  (where  $D$  is the outside diameter of the loose tube). This test is to be repeated 4 times on the same sample length of the loose tube.

**Requirement:** No damage or kink should appear on the surface of the tube.

**4.17 Drainage Test for Loose Tube and Drip test on the cable (Type Test):**

**a. Drainage Test for loose Tube**

**Sample Size:** 30 cm tube length.

**Test procedure:**

1. Cut the tube length to 40 cm.  
Fill the tube with the tube filling gel ensuring that there are no air bubbles and the tube is completely full.
- 2.
3. Place the filled tube in a horizontal position on a clean worktop and cut 5 cm from either end so that the finished length of the sample is 30 cm.
4. Leave the filled tube in a horizontal position at an ambient temperature for 24 hrs. (This is necessary because the gel has been sheared and the viscosity has been reduced during the filling process).
5. The sample tube is then suspended vertically in an environment heat oven over a weighed beaker. It is left in the oven at a temperature of  $70^{\circ}\text{C}$  for a period of 24 Hrs.

6. At the end of the 24 hours period the beaker is checked and weighed to see if there is any gel in the beaker.

**Results:**

1. If there is no gel or oil in the beaker the tube has PASSED the drainage test.
2. If there is gel or oil in the beaker the tube has FAILED the drainage test.

**b. Drip test on the cable**

**Objective:** The purpose of this test is to determine the ability of jelly in the O.F. cable to withstand a temperature of 70 degree C.

**Method:** Take a sample of 30 cm. length of the cable with one end sealed by end cap. Remove outer black sheath, binder tapes for 5 cm from open end of the sample. Clean the jelly. Then the sample is kept vertically with open end downwards in the oven for 24 hours at 70° C with a paper under the sample.

**Test Specs:** Examine the paper placed below the cable inside the oven for dripping of the jelly after 24 hours. There should be no jelly drip or oily impression on the paper.

**4.18 Check of easy removal of sheath:**

**Objective:** Check of the easy removal of sheath of the fiber optic cable by using normal sheath removal tool.

**Procedure:** To check easy removal, the sheath shall be cut in circular way and the about 300 mm length of the sheath should be removed in one operation. It should be observed during sheath removal process that no undue extra force is applied and no component part of the cable is damaged. One should be able to remove the sheath easily.

**4.19 Check of the effect of aggressive media on the cable (Acidic and Alkaline Behaviour) (Type Test):**

**Procedure:** To check the effect of aggressive media, solution of PH4 and PH10 shall be made. The two test samples of the finished cable, each of 600 mm in length, are taken and the ends of the samples are sealed. These test samples are put in the PH4 and PH10 solutions separately. After 30 days these samples are

taken out from the solutions and examined for any corrosion etc. on the sheath and other markings of the cables. (Test method no. ISO175).

**Requirement:** The sample should not show any effect of these solution on the sheath and other marking of the cable.

#### **4.20 Termite & Rodent Test (Type Test):**

Termite & Rodent test shall be carried out at any NABL accredited /Government lab on finished cable samples. The reports shall be submitted by the manufacturers. Termite resistance shall be provided with an additive/without additive in outer sheath and rodent protection shall be provided with Glass roving yarns around the periphery of inner sheath and these yarns should be spread uniformly around the periphery of inner sheath.

The following minimum parametric tests on Anti termite / Anti rodent dopants shall be carried out during the TSEC testing

1. Non-toxicity
2. Thermal Stability
3. Long life Span / half-life
4. Compatibility
5. Efficacy

The thermal stability of the dopant should not deteriorate during cable execution process. The life of the dopant should be equal or better than the life of the cable specified in the technical specification herein. Appropriate certificate in this regard from any neutral lab accredited with NABL / Government Laboratory / Institute should be produced.

Similarly other parameters such as non toxicity, efficacy and compatibility shall be certified in any neutral lab accredited with NABL / Government Laboratory / Institute and test report is to be submitted during TSEC testing.

The above tests mentioned here are the minimum test requirements. BBNL can specify any other test / changes in parametric values which shall be deemed necessary at a later stage and these will have to be mandatorily complied with.

\*\*\*\*\* Page end\*\*\*\*\*

## **PART II – GENERAL REQUIREMENTS**

### **5.0 Engineering Requirements:**

#### **5.1 Cable Marking:**

5.1.1 A long lasting suitable marking shall be applied in order to identify this cable from other cables. The cable marking shall be imprinted (indented). The marking on the cable shall be indelible of durable quality and at regular intervals of one meter length. The accuracy of the sequential marking must be within -0.25% to +0.5% of the actual measured length. The sequential length markings must not rub off during normal installation and in life time of optical fibre cable. The total length of the cable supplied shall not be in negative tolerance.

5.1.2 The marking shall be in contrast colour over the black HDPE Sheath (jacket) and shall be one by hot foil indentation method. The colour used must withstand the environmental influences experienced in the field.

5.1.3 The type of legend marking on O.F. cable shall be as follows:

- a) Company LOGO
- b) Legend containing internationally acceptable Laser symbol
- c) Type of Fibre – G.652 D
- d) Number of Fibres
- e) Type of cable
- f) Year of manufacture
- g) Sequential length marking
- h) User's Identification: User Identification Marking on the cable shall be "BBNL" and the BBNL logo shall also be used.
- i) Cable ID

#### **5.2 Cable Ends:**

5.2.1 Both cable ends (the beginning end and end of the cable reel) shall be sealed and readily accessible. Minimum 5 meter of the cable of the beginning end of the reel shall accessible for testing. Both ends of the cable shall be kept inside the drums and shall be located so as to be easily accessible for the test. The drum (conforming to GR No. G/CBD-O1/02 Nov. 94 and subsequent amendment) should be marked to identify the direction of rotation of the drum.

Both ends of cable shall be provided with cable pulling (grip) stocking and the anti twist device (free head hook). The wooden drums shall be properly treated against termites and other insects during transportation and storage. The manufacturer shall submit the methodology used for the same

- 5.2.2 An anti twist device (Free head hook) shall be provided, attached to both the ends of the cable pulling arrangement. The arrangement of the pulling eye and its coupling system along with the anti twist system shall withstand the prescribed tensile load applicable to the cable.

### **5.3 The nominal drum length**

- 5.3.1 Length of OF Cable in each drum shall be 2 Km  $\pm 10\%$  and shall be supplied as per the order. The variation in length of optical fibre cable, as specified above (in each drum), shall be acceptable.

- 5.3.2 The fibres in cable length shall not have any joint.

- 5.3.3 The drum shall be marked with arrows to indicate the direction of rotation.

- 5.3.4 Packing list supplied with each drum shall have at least the following information:

- a) Drum No.
- b) Type of cables
- c) Physical Cable length
- d) No. of fibres
- e) Length of each fibre as measured by OTDR
- f) The Cable factor - ratio of fibre/cable length
- g) Attenuation per Km. of each fibre at 1310 & 1550 nm
- h) Users / Consignee's Name
- i) Manufacturers Name, Month, Year and Batch No.
- j) Group refractive index of fibre.
- k) Purchase Order No.
- l) Cable ID

### **5.4 Colour coding in OF Cables**

5.4.1 The colorant applied to individual fibres shall be readily identifiable throughout the lifetime of the cable and shall match and conform to the Munsell Colour Standards (EIA-359-A) and also IEC Publication 304 (4).

#### 5.4.2 Colour Coding Scheme

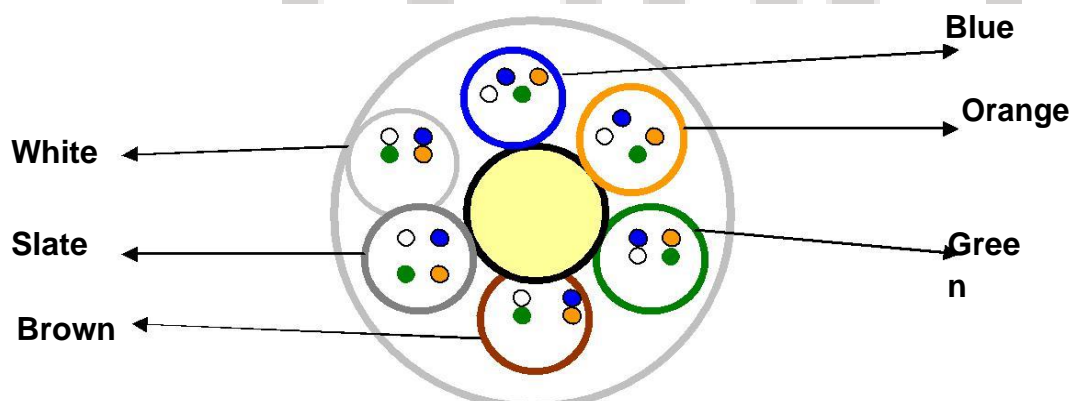
When the loose tubes are placed in circular format, the marking to indicate the loose tube no. "1" shall be in blue colour followed by loose tube no.2 of orange and so on for other tubes as per the colour scheme given below and complete the circular format by placing the dummy /fillers at the end.

Depending upon the number of fibres in a loose tube (which depends on the cable capacity), the fibres are serially chosen from the column no. II of the following table-1. Last fibre in a tube shall be of natural color, while the rest of fibres are colored.

**Table -1: Colour Coding scheme of the Optical Fibre & Loose tube**

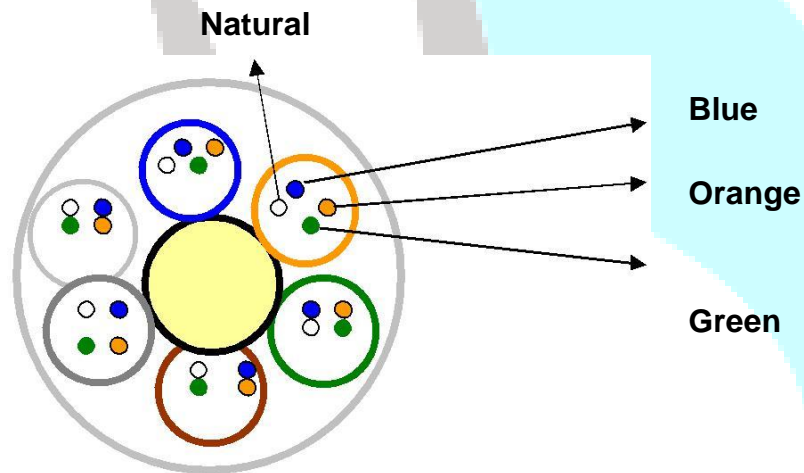
No. of Fibers/Buffer tube I	Fiber identification II	Loose tube identification III
1	Blue	Blue
2	Orange	Orange
3	Green	Green
4	Natural	Brown
5		Slate
6		White

**Colour coding of Loose Tubes for 24 fibres (Refer Table 1)**



**(Loose Tube Colour: Blue, Orange, Green, Brown, Slate, White)**

**Color coding of 24 Fibres within Loose Tubes (Refer Table 1)**



**(Fiber Colour: Blue, Orange, Green, Natural)**

## **6.0 Quality Requirements:**

6.1 The cable shall be manufactured in accordance with the international quality standards ISO 9001-2008 (latest issue) for which the manufacturer should be duly accredited. The Quality Manual shall be submitted by the manufacturer.

## **6.2 Raw Material:**

6.2.1 The cable shall use the raw materials approved against the GR No. TEC/GR/TX/ORM-01/04 SEP.09 and the subsequent amendment issued, if any.

6.2.2 Any other material used shall be clearly indicated by the manufacturer. The detailed technical specifications of such raw materials used shall be furnished by the manufacturer at the time of evaluation/testing.

6.2.3 The raw materials used from multiple sources is permitted and the source / sources of raw materials (Type and grade) from where these have been procured shall be submitted by the manufacturer.

6.2.4 The manufacturer can change the raw material from one approved source to other approved source with the approval of BBNL. In case of change of source/grade of SM Optical Fibre, the call for fresh evaluation/testing shall be decided by BBNL.



6.2.5 The raw material used (HDPE black in colour) for outer sheath shall protect the cable from attack by termite & rodent. The manufacturer shall specify anti-termite and anti-rodent (optional) additives and submit the detail characteristics of the material and additives used to make it termite & rodent (optional) proof. The additives shall also be non-toxic. The cable shall be tested for the presence of Anti termites & Anti rodent (optional) additives by recognized laboratory or institute. The cable shall also be tested for its termite & rodent (optional) proven-ness by NABL accredited Lab / Govt laboratory or institute.

6.2.6 The HDPE black in colour used for sheath shall be UV stabilised.

**Note:** A test certificate from a recognised laboratory or institute may be acceptable for the UV stability of the HDPE sheath material

6.2.7 The material used in optical fibre cable must not release hydrogen that will affect the characteristics of optical fibres.

**Note:** A test certificate from a NABL accredited Lab / Govt laboratory or institute shall be mandatory.

### 6.3 Cable Material Compatibility:

Optical fibre, buffers/core tubes, and other core components shall meet the requirements of the compatibility with buffer/core tube filling material(s) and/or water-blocking materials that are in direct contact with identified components within the cable structure (This shall be tested as per clause no. 6.3.4 of Telecordia document GR-20-CORE issue 2, July 1998).

**Note:** The tests may be conducted in house (if facility exist) or may be conducted at CACT or any NABL accredited Lab / Govt. laboratory.

### 7.0 Documentation:

7.1 Complete technical literature in English with detailed cable construction diagram of various sub-components with dimensions, weight & test data and other details of the cable shall be provided.

7.2 All aspects of installation, operation, maintenance and fibre splicing shall also be covered in the handbook. The pictorial diagrams of the accessories (with model no. and manufacturer name) supplied along with the cable as package shall be also be submitted. A hard as well as soft copy of the manuals shall be provided.

## **8.0 Safety:**

- 8.1 The material used in the manufacturing of the Optical fibre cables shall be non-toxic and dermatologically safe in its life time and shall not be hazardous to health. The manufacturer shall submit MSDS (Material safety Data Sheet) for all the material used in manufacturing of OF Cable to substantiate the statement.

## **9.0 Procedures for the issue of Evaluation/ Testing certificate for Metal Free Optical Fiber Cable With Double HDPE Sheath**

- 9.1 For the issue of Evaluation/Testing certificate for low fibre count of Metal Free Optical Fibre Cables against the specifications under this section to the manufactures having valid Evaluation/Testing certificate for higher fibre count of Metal Free Optical Fibre cables against this specification without conducting the actual tests on the cable, following is stated.
- i) The manufacturer may seek TAC/ TSEC against the technical specifications of 24 Fibre Optical Cable mentioned in Section-IV-C of the tender document.
  - ii) The list of the Raw Materials used, the make and grade of the raw material and the certificate of source approval issued by CACT or any NABL accredited Lab / Govt. laboratory along with the details of the Raw Materials used in the manufacturing of the 24 fibre count OF cable.
- 9.2 Additional required information from the manufacturer may be sought (regarding manufactured Optical Fibre Cable) and the manufactured cable may be inspected at the manufacturer's premises. After all the above requirements are met, the Evaluation/Testing certificate may be issued based upon the test results and other details submitted by the manufacturer.
- 9.3 The above procedure shall be applicable only to the approval of Metal Free Double HDPE Sheathed Optical Fibre Cables against the specifications given in this tender and subsequent amendments, if any.

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### Annex.1

The following parameters of the component parts of the cable are to be taken in to account while designing and manufacturing the optical fibre cables of the required fibre count. These parameters shall be checked during evaluation of the OF cables.

SN	Parameter	Unit	24 Fibre OF cable
1	FRP Rod EAA Coated	Mm	2.0+0.1/-0.0
2	Tube ID (min)	Mm	1.2
3	Tube OD	Mm	1.9± 0.1
4	No of fibre /tube	No	4
5	Color of fibre		BL,OR, GR, NAT
6	No of loose tubes	No	6
7	Colour of loose tubes		BL,OR, GR,BR, SL,WH
8	No of dummy cord	No	0
9	Tube stranding lay over length	Mm	90-110
10	Inner Sheath Thickness (refer clause 3.8.8)	mm	1.2
11	Qty. of Impregnated Glass roving (min.)	Kg/Km	20
12	Outer Sheath Thickness	mm	1.6
13	Cable diameter	mm	13.2±1.0mm
14	Nominal cable weight	Kg/ km	140
15	Cable to be designed to Fibre strain value of	%	0.1
16	Excess fibre length	%	0.65
17	Cable to be tested at defined Load for fibre strain value of	%	0.25

Note: The manufacturer shall submit the design calculations which shall be cross checked.

## REFERENCES

### TEC STANDARDS

- |   |                                      |  |
|---|--------------------------------------|--|
| 1 | GR No. TEC/GR/TX/ORM-01/04 SEP.09    | Specification for Raw Material used in manufacturing of OF Cables.                   |
| 2 | GR No. GR/OFT-01/03. APR 2006        | Tools for installation & Operating the OFC & for assembly of the OF Splice Closures. |
| 3 | GR No. G/CBD-01/02. NOV 94           | Drum specifications for Cable ends.  |
| 4 | GR No. TEC/GR/TX/OJC-002/03/APR-2010 | Specifications for Splice Closure for Optical Fibre Cable                            |

### OTHER STANDARDS (EIA/IEC/Bell Core/CISPR/ISO etc.)

- |    |  |  |
|----|--|--|
| 1. | ITU-T G.652 D  | ITU-T Recommendations  |
| 2. | GR-20-CORE July 98   | Generic Requirement for Optical Fibre Cable (Bell Core)                  |
| 3. | IEC 811-5-1, IEC 794-1-2-E1<br>IEC 794-1-2-E2, IEC 794-1-2-E3<br>IEC 794-1-2-E4, IEC 794-1-2-E7,<br>IEC 794-1-2-E10,<br>IEC 794-1-2-F1, IEC 794-1-2-F3,<br>IEC 794-1-2-F5, IEC 60793-1-30<br>IEC 60793-1-31 IEC 60793-1-32<br>IEC 60793-1-33 IEC 60793-1-34<br>IEC 60793-1-47, IEC 60793-1-51,<br>IEC 60793-1-52, IEC-60793-1-53<br>IEC -60793-2-50, | Test Methods for Optical Fibres  |
| 4. | IEC 304(4), EIA 359-A  | Colour Standard  |
| 5. | EIA 455-104, EIA/TIA-455-181,<br>EIA/TIA-455-73  | Test Method for Optical Fibre  |
| 6. | ISO 175,<br>ISO 9001-2000  | Test Method for Optical Fibre<br>International Quality Management System |
| 7. | FOTP-89,<br>FOTP-181   | Test Methods   |

8.     ASTM D-566,  
          ASTM D-790  
          ASTM D-1248,  
          ASTM D-4565
- Test Methods

## LIST OF ABBREVIATIONS

ASTM	- American Society for Testing Materials
AISI	- American Iron and Steel Institute
BIS	- Bureau of Indian Standards
BSNL	- Bharat Sanchar Nigam Limited
FRP	- Fibre Reinforced Plastic
HDPE	- High Density Polyethylene
IEC	- International Electro Technical Commission
IS	- Indian Standards
ISO	- International Standard Organisation
KV	- Kilo Volt
MFD	- Mode Field Diameter
OF	- Optical Fibre
QA	- Quality Assurance
QM	- Quality Manual
RMS	- Route Mean Square
UV	- Ultra Violet

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## **Section- II**

### **Chapter 5** **OFFER LETTER**

To

RailTel Corporation of India Limited,  
Plate-A, 6th Floor, Office Block-2,  
NBCC Building, East Kidwai Nagar, New Delhi-110023  
T: 011-22900600, F : 011-22900699

I/We \_\_\_\_\_ have read the various conditions detailed in tender documents attached here to and hereby agree to ABIDE BY THE SAID CONDITIONS. I/We also agree to keep this tender open for acceptance for a period of 90 days from the date fixed for opening the same and in default thereof, I/We will be liable for forfeiture of my/our Earnest Money. I/We offer to SUPPLY as per Bid Data Sheet at the rates quoted in the attached schedules and hereby bind myself/ourselves to complete the work within as per Bid Data Sheet from the date of issue of Purchase Order. I/We also hereby agree to abide by the Various Conditions of Contract and to carry out the supplies according to the Specifications for materials and works laid down by the RailTel for the present contract.

2. A sum of Rs.4,53,000/- (Rupees Four Lakh Fifty Three Thousand) through IRePS Portal is herewith forwarded as "Earnest Money". 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 15 days after receipt of orders to that effect.

SIGNATURE OF SUPPLIER (S)

Date

SIGNATURE OF WITNESS

CONTRACTOR (S) ADDRESS

- 1.
- 2.

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## **Chapter 6**

### **INSTRUCTIONS TO THE E-TENDERERS**

For E-Tendering bids /information by bidders is to be submitted "Online" on e-Procurement Portal <https://www.ireps.gov.in>. Any document / information pertaining to this chapter will have to be submitted by the bidder on line. The digital signature of the tenderer on the e-tender form will be considered as confirmation that the tenderer has read, understood and accepted all the documents, unless special deviation is quoted by the tenderer in the technical & commercial deviation templates.

#### **PLEASE NOTE**

ALL COLUMNS SHOULD BE FILLED AND BLANK COLUMNS, IF ANY, SHOULD BE MARKED AS NIL.

PLEASE READ THE SCHEDULE OF REQUIREMENTS, INSTRUCTIONS TO THE TENDERERS, GENERAL & SPECIAL TENDER CONDITIONS, STANDARD CONDITIONS OF CONTRACT AND TECHNICAL SPECIFICATIONS OF SCHEDULE OF REQUIREMENTS BEFORE FILLING UP THE TENDER FORM CAREFULLY. PLEASE SIGN ON EACH PAGE.

THE TENDERERS MAY DOWNLOAD TENDER FORM FROM THE WEB SITE 'www.railtelindia.com' OR FROM THE e-Procurement Portal <https://www.ireps.gov.in>,

NOTE: For online bid submission the tenderer will have to necessarily download an official online copy of the tender documents from e-Procurement Portal <https://www.ireps.gov.in>, and this should be done well before the deadline for bid-submission.

The Tender document consists of the following:-

Notice Inviting Tender

#### **Section 'I' (Variable)**

Chapter 1 Schedule of Requirements (Price Schedule)

Chapter 2 Bid Data Sheet

Chapter 3 Special Tender Conditions

Chapter 4 Special (Technical) Conditions of Contract and  
Technical Specifications

#### **Section 'II' (Fixed)**

Chapter 5 Offer Letter

Chapter 6 Instructions to the Tenderers

Chapter 7 General Tender Conditions

Chapter 8 Standard Conditions of Contract

Chapter 9 Performa for Performance Bank Guarantee

Chapter 10 Check List



## **6.1. Offer Letter**

- 6.1.1** The bidder shall complete the Offer Letter (Chapter-5) and the Price Schedule (Chapter-1) furnished in the bid document, indicating the goods to be supplied, description of the goods, associated technical literature, quantity and prices etc.
- 6.1.2** Bidders should enclose their credentials including supply of equipment/material to Reputed Telecom Operators and Government/PSUs. (Performa to be enclosed)

## **6.2 Instructions for Tender Document TO THE TENDERERS**

The RailTel Tenders are published on [www.railtelindia.com](http://www.railtelindia.com) and on **e-Tendering Portal** <https://www.ireps.gov.in> . In addition to submitting the e-Tender documents online, they should also submit a Tender cost through IREPS.

**NOTE:** For online bid submission the tenderer will have to necessarily download an official online copy of the tender documents from e-Procurement Portal <https://www.ireps.gov.in>, and this should be done well before the deadline for bid-submission.

## **6.3 Submission of Offers and Filling of Tender:**

This e-tender should be duly submitted online using the e-Procurement Portal <https://www.ireps.gov.in>.

- a. The rates quoted should be written both in words and figures. The unit of rates should be in metric system and as per tendered specification/schedule. In case of difference between words and figures, the rate in words will prevail. If there is a discrepancy between the unit price and total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected by the purchaser accordingly.
- b. The Tenderers are requested to go through the Standard Conditions, Special Conditions, Instructions to Tenderers, General Conditions carefully and note that, by submitting the tender documents, duly signed, they have accepted these conditions and undertake to abide by these conditions (unless specifically disagreed to clause wise).

## **6.4.0 Earnest Money Deposit (EMD) :**

The tenderer shall deposit earnest money as per BID DATA SHEET through IREPS. Tenders without earnest money will be summarily rejected.

No bank guarantee for EMD is accepted. Earnest Money of unsuccessful tenderers shall be returned after finalization of contract and that of successful tenderer after conclusion of Contract and securing Security Deposit.

#### **6.4.0.1 Forfeiture of EMD**

- a) The EMD will be forfeited if tenderer withdraws its tender during the period of tender validity specified in BID DATA Sheet of Tender Document.
- b) In the case of successful tenderer, if the tenderer fails to sign the contract in accordance with Para 8.4.0 of Tender document and to furnish Performance Bank Guarantee in accordance with Para 6.5.1 of tender document within specified period.

#### **6.4.1 For NSIC registered Firm**

1. For small scale units registered with NSIC under single point registration Scheme and participating in this tender enquiry, following exemptions are available:-
  - (i) They are exempted from cost of tender documents.
  - (ii) They are also exempted from depositing Earnest money.

These exemptions are applicable provided units are registered with NSIC for tendered item and registration is current and valid. Firms claiming these exemptions are required to submit along with their offer, copy of their current and valid NSIC registration certificate for the tendered item, otherwise their offer would not be considered.

2. No exemption is, however, applicable to these units from payment of security deposit/ Performance Bank Guarantee.

3. The participating MSEs in a tender, quoting price within the band of L1+15% shall also be allowed to supply a portion of the requirement by bringing down their prices to the L1 price, in situation where L1 is from someone other than an MSE. Such MSEs shall be allowed to supply up to 25% of the total tendered value. In case of more than one such eligible MSE, the supply will be shared equally.

**NOTE:** For online bid submission the tenderer will have to necessarily download an official online copy of the tender documents from IREPS's e-procurement portal, and this should be done well before the deadline for bid-submission.

#### **6.4.2 Public Procurement (Preference to Make in India):**

Applicable only for all Global tenders & for all tenders where the minimum local content shall be 50% & tenders valuing above Rs. 5 Lakhs.

The provisions of Public Procurement (Preference to Make in India), Order-2017 with latest revision is applicable.

**6.4.2.1 (a) Local content:** The minimum local content shall be 50% or as indicated in the tender enquiry.

**(b) Margin of Purchase Preference:** The margin of purchase preference is 20%.

**(C) Fee for complaints:** Fee for filing a complaint under the order shall be Rs.10,000/- per case. The complaint shall be filed in the office of the Director RailTel. The fee shall be deposited with the office of the Director Finance/RailTel Corporation of India Limited, New Delhi.

#### **6.4.2.2 Verification of local content:**

- a. The local supplier at the time of tender, bidding or solicitation shall be required to provide self-certification that the item offered meets the minimum local content and shall give details of the location(s) at which the local value addition is made.
- b. In case of procurement for a value in excess of Rs.10 Crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
- c. False declarations will be in breach of the Code of integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.
- d. A Supplier who has been debarred by any procuring entity for violation of this order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the debarment.
- e. **Debarment of bidders:** In respect of procuring entities other than the one which has carried out the debarment, the debarment takes effect prospectively from the date of uploading on CPPP so that ongoing procurements are not disrupted.

#### **6.4.2.3 Requirement of Purchase Preference:**

Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to local suppliers in all procurements undertaken by procuring entities in the manner specified hereunder:

- a. In procurement of all goods, services in respect of which the Nodal Ministry has communicated that there is insufficient local capacity and local competition, and where the estimated value of procurement is Rs.50 Lakhs or less, only local suppliers shall be eligible. If the estimated value of procurement of such goods is

more than Rs.50 Lakhs, the provisions of sub-paragraph b or c as the case may be, shall apply.

**b.** In the procurements of goods or works which are not covered by paragraph (a) above and which are divisible in nature, the following procedure shall be followed:

- i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a local supplier, the contract for full quantity will be awarded to L1.
- ii. If L1 bid is not from a local supplier, 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the local suppliers will be invited to match the L1 price for the remaining 50% quantity subject to the local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such local supplier subject to matching the L1 price. In case such lowest eligible local supplier fails to match the L1 price or accepts less than the offered quantity, the next higher local supplier within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on local suppliers, then such balance quantity may also be ordered on the L1 bidder.

**c.** In procurements of goods or works not covered by sub-paragraph (a) above and which are not divisible, and in procurement of services where the bid is evaluated on price alone, the following procedure shall be followed:

**i).** Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a local supplier; the contract will be awarded to L1.

**ii).** If L1 is not from a local supplier, the lowest bidder among the local suppliers will be invited to match the L1 price subject to local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such local supplier subject to matching the L1 price.

**iii)** In case such lowest eligible local supplier fails to match the L1 price, the local supplier with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the local suppliers within the margin of purchase preference matches the L1 price, then the contract may be awarded to the L1 bidder.

**6.4.2.4 Exemption of small purchases:** Notwithstanding anything contained in Para 6.4.2.3, procurements where the estimated value to be procured is less than Rs.5 Lakhs is exempted.

#### **6.4.3 Updation of Labour data on Railway's shramikkalyan Portal**

- A. Contractor is to abide by the provisions of Payment of Wages Act & Minimum Wages Act in terms of clause 54 and 55 of Indian Railways General Condition of Contract. In order to ensure the same, an application has been developed and hosted on website 'www.shramikkalyan.indianrailways.gov.in'. Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The Registration/updation of Portal shall be done as under:
- (a) Contractor shall apply for one-time registration of his company/firm etc. in the Shramikkalyan portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration on the portal within 7 days of receipt of such request.

- (b) Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LOAs issued in his favour.
  - (c) The contractor once registered on the portal, shall provide details of his Letter of Acceptance (LoA)/Contract Agreements on shramikkalyan portal within 15 days of issue of any LoA for approval of concerned engineer. Engineer shall update (if required) and approve the details of LoA filled by contractor within 7 days of receipt of such request.
  - (d) After approval of LOA by Engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyan portal on monthly basis.
  - (e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.
- B. While processing payment of any 'On Account bill' or 'Final bill' or release of 'Advances' or 'Performance Guarantee / Security deposit', contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at 'www.shramikkalyan.indianrailways.gov.in' till \_\_\_\_\_ Month, \_\_\_\_\_ Year."

## **6.5 Security Deposit:**

The successful tenderer shall submit 10% of total value of the stores/works detailed in the Acceptance Offer towards security deposit in the form of DD/FDR or irrevocable Bank Guarantee from any scheduled bank for due fulfillment of contract. The instrument shall be valid for three months beyond the warranty period. The security deposit shall be released after successful completion of Contract including warranty period, 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 only.

### **6.5.1 Performance Bank Guarantee:**

In case, successful tenderer wishes to furnish security deposit in the form of Performance Bank guarantee, the same should be submitted within 30 days of issue of acceptance/ Advance purchase order as per under mentioned item (i) & (ii), 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. This PBG should be from a Scheduled Bank and should cover warranty period plus three months for lodging the claim. The performance security Bond will be discharged by the Purchaser after completion of the supplier's performance obligations including any warranty obligations under the contract.



- i) Performance Bank Guarantee of 2.5% of total value of the stores is required to be submitted and should be valid for 33 months (12 +18+3) from the date of issue of APO to cover Validity of Advance Purchase Order, delivery period and Warranty period.
- ii) Performance Bank Guarantee of 7.5 % of Sub PO value of the stores is required to be submitted with validity 3 months beyond warranty period of supply.

Note: A separate advice of the BG will invariably be sent by the BG 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 BG through SFMS to the RailTel's Bank.

#### **6.6 No Interest on Earnest Money and Performance Security:**

No interest shall be paid on the amount of earnest money and Performance Security held by the RailTel, at any stage.

#### **6.7 Fax Quotations & Late Tenders:**

Fax Tender documents and Late/Delayed tenders would not be considered.

#### **6.8 Drawings and Specifications:**

If any tenderer happens to quote with their own Drawing No / Part No / Specification, then, they shall have to, necessarily, submit all the requisite documents and information, in support of their offer being in conformity with the tender Drawing / Specification. Furthermore, duly authenticated copies of such drawings / specifications / catalogue are also to be enclosed, failing which the offer will be liable to be rejected.

#### **6.9 Attendance of Representatives for Tender Opening:**

Representatives of tenderers desirous to attend the tender opening can do so on production of a proper letter of authority from the respective firm, failing which they may not be allowed to attend the tender opening. In addition, representatives desirous of attending the Online Public Tender Opening Event can do so by getting authorized for such participation by the Super-User/ Master User of their respective organizations on ETS. Authorized representatives of those firms who have submitted the tender documents alone shall be allowed to attend the tender opening.

#### **6.10 Other Particulars to be enclosed along with tender:**

Following details should also be enclosed along with the tender:-

- i) Performance statement of last three years for supply of same or similar items to Railways, BSNL, MTNL, Government PSU's & Telecom Service Providers. This Performance Statement is to be submitted in following format:-

Year	PO. No. & Date with description of item	Name of the purchaser	Qty. ordered	Date of delivery in the Purchase Order	Qty. supplied within scheduled date of delivery	Qty. supplied during 1st extension	Qty. supplied during 2nd extension	Qty. supplied during 3rd extension
1	2	3	4	5	6	7	8	9

They may be deprived of any order against this tender if the information furnished is found to be incorrect later on. Correct status/supply position of pending orders, if any, should be invariably indicated. Supporting documents are to be enclosed. Photocopies of the supply/purchase orders along with the Inspection Certificates and Receipt Notes should be enclosed for ready reference, along with tender to substantiate their past performance.

- ii) Details of Machinery and Plant, other equipments, testing facilities, quality management/ control systems and details of technical manpower available.
- iii) Tenderers should submit documentary evidence in respect of their approval indicating current validity and approval of their equipment offered wherever necessary.
- iv) Complete Tender documents duly signed & stamped on each page in token of acceptance.
- v) The make and model No. of the equipment offered against each schedule of requirement should be clearly mentioned in the offer along with the technical specifications of the concerned model. Enclose the complete Technical literature.

#### 6.11 Rate, Taxes and Duties: -

The price quoted in the offer should be firm, fixed indicating the breakup and inclusive of all taxes & duties like import, custom, antidumping, CGST, SGST, IGST, UTGST etc. The Offer should be inclusive of packing, forwarding, freight up to destination, insurance charges.

- 6.11.1 Tenderer shall quote all-inclusive rates, but there shall be break up of basic price and all type of applicable taxes such as SGST/CGST/IGST/UTGST along with respective HSN/SAC Code under GST Law (Including tax under reverse charges payable by the recipient).



- 6.11.2 Bidder shall issue valid tax invoice to RailTel for availing proper credit of CGST/SGST/IGST/UTGST in case of award of Contract. GST will not be reimbursed in the absence of valid tax invoice.
- 6.11.3 For all the taxable supplies made by the vendor, the vendor shall furnish all the details of such taxable supplies in the relevant returns to be filed under GST Act.
- 6.11.4 If the vendor fails to comply with any of the above, the vendor shall pay to purchaser any expense, interest, penalty as applicable under the GST Act.
- 6.11.5 In case of incorrect reporting of the supply made by the vendor in the relevant return, leading to disallowance of input credit to purchaser, the vendor shall be liable to pay applicable interest under the GST Act to the credit of purchaser. The same provisions shall be applicable in case of debit/credit notes.
- 6.11.6 Wherever the law makes it statutory for the Purchaser to deduct any amount towards GST at sources, the same will be deducted and remitted to the concerned authority.
- 6.11.7 In regards to works contract, the tenderer should have registration no. of GST in respective state where work is to be executed and shall furnish GST registration certificate on award of LoA.
- 6.11.8 The imposition of any new tax and/or increase/ in the aforesaid taxes, duties levies, after the last stipulated date for the receipt of tender including extensions if any and the bidder there upon necessarily and properly pays such taxes/levies/cess, the bidder shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of RailTel attributable to delay in execution of work within the control of bidder. The bidder shall, within a period of 30 days of the imposition of any such tax or levy or cess, give a written notice thereof to RailTel that the same is given pursuant to this condition, together with all necessary information including details of input credit relating thereto. In the event of non-payment/default in payment of any of the above taxes, RailTel reserves the right to with-hold the dues/payments of bidder and make payment to state/Central Government authorities as may be applicable. However, if the rates are reduced after the last stipulated date for receipt of tender, bidder has to pass on the benefits to RailTel.
- 6.12 Deleted**
- 6.13 Deleted**
- 6.14 Deleted**
- 6.15** The tenderers are to indicate the Income-Tax PAN details and enclose a Photocopy of the same as governed by extant rules of the Government of India.

**6.16 Validity:** Tenderers are to keep validity of their offer open for a minimum period as per bid data sheet. Offers with validity period of shorter duration would be taken as non-responsive and rejected.

**6.17 Evaluation Criteria:**

- i) Rates quoted by the Tenderers with discounts, if any, linked to quantity will not be considered for determining inter-se position of the offers. Discounts with conditions attached to early payment, early Receipt/ Accountal etc., will also not be considered for determining inter-se position of the offers. However, RailTel may avail the discounts linked to quantity, early payment, early receipt/ Accountal etc. if otherwise, firm's offer is found to be acceptable.
- ii) Inter-se position of the offers will be determined on Total Unit Rate on **CIP destination basis** which will include basic rate, ED & Educational Cess, Sales Tax/VAT, freight, insurance and any other charge or cost quoted by the tenderer. Octroi/Entry tax would not be included for inter-se position.
- iii) Evaluation will be done on total value.

**6.18 The Special Tender Conditions, wherever, they differ from General and Standard Conditions will override the later.**

**6.19 Compliance & Deviation statements:**

Compliance statement for acceptance of the Technical Specifications (Chapter4) and Instructions & Conditions (Chapter3, Chapter 6, Chapter 7 and Chapter 8) shall be enclosed by the tenderer with the offer along with the technical literature of the material and other documents in support of relevant clauses. Deviation statement, if any, (Chapter-wise and Clause-wise) from these technical Specification & Tender conditions should also be submitted wherever tenderer wishes to deviate from these conditions.

**6.20 Tenderer's Comments:**

Any comments which the tenderer desires to make shall take the form of a separate statement in English and giving reference to page, clause or item numbers and shall be submitted along with the tender.

**6.21 Deleted.**

**6.22 Tax deducted at Source:**

Statutory deduction of taxes would be made as per the prevalent rules .The PAN number may be furnished invariably.

### **6.23 Addenda / Corrigenda:**

Addenda / Corrigenda to the tender documents may be issued by RailTel prior to the date of opening of the tenders, to clarify or reflect modifications in the contract terms and conditions or in the design. Such addendum/corrigendum shall be available on IREPS's e-Procurement Portal only. Tenderers who are unable or unwilling to bring their tenders to conform to the requirements of RailTel are liable to be rejected.

### **6.24 Ambiguity:**

If there is any ambiguity or doubt as to the meaning of any of the tender clauses/ conditions or if any additional information required, the matter should immediately be referred to RailTel in writing.

### **6.25 Bid submission and Opening date**

**6.25.1** The bid should be submitted online along with Credential & Price bid document. (all documents).

**6.25.2** EMD should be submitted through IREPS portal.

**6.25.3** Power of attorney in favour of the signatory duly authorizing the signatory shall be submitted in a separate envelope to the tendering authority before the due date and time of submission of the e-Tender.

**6.25.4** The envelope shall be addressed to the Authority as per Bid Data Sheet.

**6.25.5** The envelope shall bear name of procurement, the tender no. and the words "DO NOT OPEN BEFORE" (due date). If the envelopes are not sealed & marked properly, RailTel will not be responsible for its misplacement, premature opening, late opening etc.

**6.25.6** The tenderer's bids will be opened at the time & date of opening of the tender given in the Bid Data Sheet (BDS) in the online simultaneous presence of such Tenderers/ Representatives who choose to be present online. The Tenders/Representatives can also choose to be physically present in the office of RailTel for the Online Public Tender Opening Event.

**6.25.7** Bids received after due date and time shall be summarily rejected and shall not be opened.

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## **CHAPTER-7**

### **GENERAL TENDER CONDITIONS**

#### **7.1 Acceptance of the Offers: -**

The RailTel is not bound to accept the lowest or any offer and reserve to itself the right to accept any offer in respect of the whole or any portion of the item specified in the tender and contractor shall be required to supply at the rate quoted.

#### **7.2. Quantity to be ordered: -**

- a) RailTel reserves the right to cancel the tender for full or part quantity tendered without assigning any reason.
- b) The purchaser reserves the right to increase and /or decrease the order quantity by a quantity not exceeding 30% of the ordered quantity on the same price and terms and conditions during the currency of the contract, with suitable delivery schedule for the enhanced quantity.

#### **7.3 Quotations for Imported items: -**

##### **7.3.1 Imported Stores offered by Indian Agents in Indian Currency:**

Any authorized dealer / agent / recognized industrial distributor quoting on behalf of their Foreign principal in Indian Rupees shall have to comply with the following: -

- a) To quote with tender specific authorization from the foreign manufacturer.
- b) (i) While quoting on behalf of foreign principals' tenderers are required to Furnish the principal's invoice / Performa invoice along with their quotation.  
(ii) Performa invoices however, may be accepted in exceptional cases where, it is not possible to obtain the invoices before the contract is placed.
- c) The tenderer shall have to undertake in the tender to comply with the following –
  - i) Consent to furnish copy of customs out passed bill of entry for the goods, relevant to each consignment, Manufacturer's Test and Guarantee certificate issued by the manufacturer, Copy of

Bill of Lading/AWB relevant to the consignment; Copy of commercial invoice of the foreign manufacturer/principals relevant to each consignment.

- ii) Current and valid authorization/dealership certificate of foreign manufacturer/ principal.
- iii) Compliance of sea/air worthy packing condition in manufacturer's original packing with manufacturer's tamper proof seal and compliance of the Packing condition as laid down in Standard Conditions of Contract Para- 8.16.0

Failure to comply with any of the aforesaid conditions as referred above will make the offer liable to be rejected.

#### **7.3.2. Deleted**

#### **7.3.3 Tenderer has to indicate the following while submitting the offer:**

- a) The precise relationship between the foreign manufacturer/principal and their agents/ associates.
- b) The mutual interest which the manufacturer/principal and the Indian agent / associates have in business of each other is to be indicated.
- c) Indian agent's Permanent Account Number is to be indicated.

#### **7.4 Payment Terms:**

- a) 90% of the value of the part supply of the equipment/material on receipt by the consignee at site duly inspected and accompanied with the following documents and any other documents mentioned in the contract:-
  - (i) Invoice. (ii) Delivery Challan (iii) contractor's certificate of dispatch (iv) Inspection certificate (v) Consignee's receipt (vi) Warranty guarantee certificate of OEM (vii) Insurance certificate (viii) Undertaking against Fall Clause (ix) OEM's certificate that the material/equipment supplied is as per specifications /the quantity material supplied is as per the SOR.
- b) Balance 10% value of supply on receipt and acceptance of full supply at site by consignee.

OR

100% payment may be made on receipt of documents stated in a) &b) in accordance with the accepted conditions provided that an additional Bank Guarantee for an amount equivalent to 10% of the value of the supplies valid for a period of six months is furnished by the supplier with the undertaking that the stores supplied shall be free from

damages/shortages. In those cases where such damages/shortages are intimated to the supplier in writing, the bank guarantee shall be extended without fail by the supplier for a suitable period at the request of the purchaser in writing. Failure to do so shall result in forfeiture of Bank Guarantee. The bank Guarantee will be released only after the cases are settled in accordance with the provisions of document.

## **7.5 Inspection:**

- 7.5.1** The supplier/manufacturer shall send inspection call letter when the material is ready to be supplied and ready for inspection. The Inspection shall be carried out at supplier's/Manufacturer's premises by the Inspecting Authority
- 7.5.2** The supplier/manufacturer shall submit along with inspection call the details of test procedures, test programs, test parameters together with permitted values, etc., and their Quality Assurance Plan.
- 7.5.3** In case material/equipment fails during inspection, the fresh lot of same material/ equipment shall be offered without any extra cost, by the manufacturer/supplier. In such a case, total cost of re-inspection including travel, lodging & boarding of the inspecting officials shall be to manufacturer's / supplier's account/cost.
- 7.5.4** Inspection of the material including that of raw material if deemed required shall be conducted by BSNL or representative authorized by RailTel in exceptional circumstances, at the firm's premises. The inspection shall be conducted by inspecting authority as per required test procedures /test plan for ensuring that the material offered meets the required specifications.
- 7.5.5** The material should be offered for inspection within three weeks of issue of purchase order. Travelling, lodging and boarding expenses of RailTel representative and charges for third party inspection if any shall be borne by RailTel, but necessary facilities to carry out test /witness inspection shall be provided by the manufacturer/supplier, free of cost.
- 7.5.6** The manufacturer shall maintain stock register (receipt, issue and balance) and defect records for the raw material. The defect records shall be in standard formats and it shall be complied on a daily/ weekly/ monthly basis and it shall be analysed. "NIL" Report shall be segregated from the accepted material. First-in First-out concept shall be implemented in foolproof manner. The batches of the raw material shall be identified and traceable. All relevant documents necessary to ensure trace-ability shall be maintained. The raw material shall be protected from direct exposure to sunlight, moisture, water ingress and heat etc.
- 7.5.7** Finished products shall be tested 100% by the factory QC personnel before being offered to RailTel for acceptance to ensure that it meets all



quality requirements as per the relevant specifications. Duly filled in test formats indicating the results of such tests shall be submitted along with material offered for inspection to RailTel.

#### **7.6 Terms of Delivery:**

- a) Mode of dispatch should be by road / reputed courier / in person through the authorized representative of the Tenderer.
- b) Tenderer shall submit the offer clearly on CIP destination basis.
- c) Transit Insurance for risk in transit should be arranged by the supplier, since risk in transport in all such cases rests with the supplier.

#### **7.7 Delivery Schedule**

- a) The tenderer should note the required delivery schedule of RailTel given in the tender schedule /offer form and quote accordingly. Vague Delivery terms must be avoided and if quoted will be taken as commercially unresponsive to RailTel's requirement.
- b) Time for and the Date of delivery as specified in tender schedule /offer form is the essence of the Contract. However, extension of Delivery date may be considered in deserving cases where genuine reasons exist. Such extensions of delivery date may be considered with or without Liquidated damages and Denial Clause as per Standard conditions of Contract.
- c) Recover from the Contractor as agreed liquidated damages and not by way of penalty a sum equivalent to half per cent of the price of any stores (including elements of taxes, duties, freight, etc.) which the Contractor has failed to deliver within the period fixed for delivery in the contract or as extended for each week or part of a week during which the delivery of such stores may be in arrears where delivery thereof is accepted after expiry of the aforesaid period **The upper limit for recovery of liquidated damages will be 10% (Ten Percent) of Total contract value provided in the contract.**

#### **7.8 Deleted.**

#### **7.9 Marking of Material Supplied:**

The tenderer should agree to indicate the Manufacture's Name, Month and Year of manufacturing by casting/stamping/etching/embossing, at an appropriate place of each piece supplied, without affecting the functional utility and structural stability of the components/material.

#### **7.10 Procurement from Manufacturers Authorized agents / Distributors:**



Only Manufacturers or their authorized Agents/ distributors need to quote with tender specific authorization from the manufacturers failing which offers are liable to be ignored.

Where a manufacturer appoints an agent or a distributor on the basis of a written agreement with him for a specific territory or specific set of items, he shall give an undertaking to the following effect.

- a) Direct dispatch from the premises of the manufacturer to the consignee.
- b) Submission of manufacturer's Test and Guarantee Certificate (MTGC) with each lot of supplies.

#### 7.11 RailTel Regions details:

S N	Region	Regional offices	Addresses	States
1	Northern Region	New-Delhi	Regional General Manager 6th Floor, IIIRD Block, Delhi Technology Park, Shastri Park, Delhi- 110053	Haryana, Rajasthan, Uttar Pradesh, Delhi, Jammu & Kashmir, Punjab, Madhya Pradesh, Himachal Pradesh, Uttaranchal.
2	Eastern Region	Kolkata.	Regional General Manager. 3rd Floor, Chatterjee International Centre, 33-A Jawaharlal Nehru Road, Kolkata-700071.	West Bengal, Orissa, Bihar, Madhya Pradesh, Chhattisgarh, Jharkhand, Assam, Tripura, Meghalaya, Manipur, Mizoram, Arunachal, Nagaland.
3	Southern Region	Secunderabad	Regional General Manager 2nd Floor B-Block, Rail Nilayam, Secunderabad- 500071.	Andhra Pradesh, Tamil Nadu, Karnataka, Kerala, Pondicherry.
4	Western Region	Mumbai	Regional General Manager Western Railway Microwave Complex, Senapati Bapat Marg, Mahalaxmi, Mumbai- 400013.	Gujarat, Maharashtra, Karnataka, Rajasthan, Madhya Pradesh, Goa.

Each Region is headed by Executive Director (ED)/Regional General Manager (RGM), under whom, Additional General Manager / Deputy General Managers (Referred as DGM's) are working.

**7.12** The requirement of the Tendered stores may be at any location within the Region indicated in clause 7.11.

**7.13 Purchaser's right to accept any Bid and to reject any or all Bids:**

The Purchaser reserves the right to accept or reject any bid, to annul the process at any time prior to award of contract and without thereby incurring any liability to the affected bidder or bidders on the grounds of the Purchaser's action.

**7.14 Issue of Confirmed Supply Orders:**

Corporate Office of RailTel will issue the Supply Orders within validity period of contract Agreement/Advance Purchase order.

**7.15 Force Majeure Clause:**

In the event of either party being rendered unable by force majeure conditions to perform any obligation to be performed by them under the contract, the relative obligation of the party affected by such force majeure shall upon notification to the other party be suspended for the period during which force majeure events last. The cost and loss sustained by either party shall be borne by respective parties.

The term force majeure employed herein shall mean Act of God, war (declared or not), storms, floods, tsunami, restraints imposed by Governments, Riots, Strikes, Go Slow, Lock Out or any labour unrest at the works of the contractor (to be substantiated by the contractor with document), civil commotion, fire, accident, sabotage, earthquake or any other natural calamities, plague, quarantine, import or export embargoes, or change in Govt. policies or the like circumstances or any happening affecting the performance by the contractor or its obligations under this contract which, in the opinion of RailTel, the contractor cannot reasonably prevent or control against.

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## Chapter 8

### STANDARD CONDITIONS OF CONTRACT

#### **8.0 Definitions and Interpretation.**

**8.0.1** In the Contract, unless the context otherwise requires;

**8.0.2** "Acceptance of Tender" means the letter of memorandum communicating to the Contractor the acceptance of his tender and includes an advance acceptance of his tender;

**8.0.3** "Consignee" means where the stores are required by the acceptance of tender to be dispatched by rail, road, air or steamer, the person specified in the Acceptance of Tender to whom they are to be delivered at the destination; Where the Stores are required by the acceptance of tender to be delivered to a person as an interim consignee for the purpose of dispatch to another person, such other persons; and in any other case the person to whom the stores are required by the acceptance of tender to be delivered in the manner therein specified.

**8.0.4.** "Contract" means and includes the invitation to tender, instructions to tenderers, acceptance of tender, Standard Conditions of Contract, Special Conditions of Contract, particulars and the other conditions specified in the acceptance of tender and includes a repeat order which has been accepted or acted upon by the contractor and a formal agreement if executed;

**8.0.5.** The "Contractor" means the person, firm or company with whom the order for the supply is placed and shall be deemed to include the contractor's successors (approved by the Purchaser), representatives, heirs, executors and administrators as the case may be, unless excluded by the terms of the contract

**8.0.6.** "The Sub-contractor" means the person, firm or company from whom the Contractor may obtain any material or fittings to be used in the supply or manufacture of the stores;

**8.0.7.** "Drawing" means the drawing or drawings specified in or annexed to the Schedule or Specifications

**8.0.8.** "Government" means the Central Government or a State Government, as the case may be;

**8.0.9.** "The Inspecting Officer" means the person specified in the contract for the purpose of Inspection of stores or work under the contract and includes his authorized representative;

**8.0.10.** "Material" means anything used in the manufacture or fabrication of the stores

**8.0.11.** "Particulars" include-

(a) "Specifications" shall mean all directions, various technical specifications, provisions and requirements attached to the contract, as originally agreed and as modified from time to time by RailTel subject to price adjustments mutatis mutandis which pertain to the method and manner of performing the work or works to the quantities and qualities of the work or works and the materials to be furnished under the contract for the work or works as may be amplified or modified by RailTel-in-charge during the performance of the contract in order to provide for unforeseen conditions or in the best interest of the work or works. It shall also include the latest edition including all addenda / corrigenda of relevant Bureau of Indian standard specifications and other relevant codes governing a particular activity or facility. The term shall include the specifications specified in the contract in respect of each type of material/goods to be used in the execution of contract.

**(b) Drawings**

(c) Pattern bearing the seal and signature of the Inspecting Officer (hereinafter called the sealed pattern) which shall include also a certified copy thereof sealed by the Purchaser for the guidance of the Inspecting Officer;

(d) Sample sealed by the Purchaser for guidance of the Inspecting Officer (hereinafter called the certified sample) which shall include a certified copy thereof sealed by the Purchaser for the guidance of the Inspecting Officer;

(e) Trade pattern, that is to say, a pattern, stores conforming to which are obtainable in the open market and which denotes a standard of the Indian Standard Institute or other standardizing authority or a general standard of the industry:

(f) "Proprietary mark "or "brand" means the mark or brand of a product which is owned by an industrial firm;

(g) Any other details governing the construction, manufacture or supply of stores as may be prescribed by the contract;

**8.0.12.** " Purchase Officer" means the officer signing the acceptance of tender and includes any officer who has authority to execute the relevant contract on behalf of the Purchaser.

**8.0.13.** " The Purchaser "means RailTel Corporation of India Ltd., Plate-A, 6th Floor, Office Block-2, NBCC Building, East Kidwai Nagar, New Delhi-

110023, acting through Chairman & Managing Director or his authorized officer.

- 8.0.14.** "Signed" includes stamped, except in the case of an acceptance of tender or any amendment thereof
- 8.0.15.** "Site" means the place specified in the contract at which any work is required to be executed by the contractor under the contract or any other place approved by the Purchaser for the purpose;
- 8.0.16.** "Stores" means the goods specified in the contract which the contractor has agreed to supply under the contract;
- 8.0.17.** "Supply Order" means an order for supply of stores and includes an order for performance of service;
- 8.0.18.** "Test" means such test as is prescribed by the particulars or considered necessary by the Inspecting Officer whether performed or made by the Inspecting Officer or any agency acting under the direction of the Inspecting officer;
- 8.0.19.** "Unit" and "Quantity" means the unit and quantity specified in the contract;
- 8.0.20.** "Engineer / Engineer-in-Charge" Shall mean an executive of RailTel in charge of works and shall include the superior executives of RailTel. He is responsible for ensuring that all fieldworks covered by the contract are carried out in accordance with approved designs, drawings & specifications and conditions of contract as agreed to. "Engineer's Representative" Shall mean the supervisor of RailTel in direct charge of the works.
- 8.0.21.** The delivery of the stores shall be deemed to take place on delivery of the stores in accordance with the terms of the contract, after approval by the Inspecting Officer if so provided in the contract to
- (a) The consignee at his premises; or
  - (b) Where so provided the interim consignee at his premises, or
  - (c) A carrier or other person named in the contract for the purpose of transmission to the consignee, or
  - (d) The consignee at the destination station in case of contract stipulating for delivery of stores at destination station.
- 8.0.22.** "RailTel" Means M/s RailTel Corporation of India Limited, which includes all the subordinate offices in Regions and territories.
- 8.0.23.** Deleted

- 8.0.24.** "Tenderer" or "Bidder" Means and includes any firm of engineers or Contractors or any company or body, corporate or otherwise, who submit the Tender which has been invited.
- 8.0.25.** "Work or Works" Means all or any of the items of the work for which the Tenderer/ Contractor has Tendered/contracted according to the specifications, drawings annexed or to be implied there from, or incidental thereto or to be hereafter specified or required in such explanatory instructions and drawings, being in conformity with the original specifications, drawings, Annexure and schedules and also such instructions and drawings additional to the aforementioned as may from time to time be issued by the Purchaser's Engineer during the progress of the contracted work.
- 8.0.26.** "Bid" or "Tender" shall mean the proposal/document that the BIDDER submits as his offer with price and conditions in the requested and specified format as detailed in 'Specifications' / 'Tender documents
- 8.0.27.** "Purchaser's Engineer" Means the Chairman & Managing Director of RailTel or successor who will decide all matters relating to design, manufacture, installation and commissioning of the plant and equipment at site.
- 8.0.28.** "CIP (Carriage & Insurance Paid) Destination" means the date of delivery would be the date on which the delivery is affected at the consignee's end within any of the RailTel's Region.
- 8.0.29.** Words in the singular include the plural and vice versa
- 8.0.30.** Words importing the masculine gender shall be taken to include the feminine gender and words importing persons shall include any company or association or body of individuals, whether incorporated or not;
- 8.0.31.** The heading of these conditions shall not affect the interpretation or construction thereof;
- 8.0.32.** Terms and expression not herein defined shall have the meanings assigned to them in the Indian Sale of Goods Act, 1930 (as amended), or the Indian Contract Act, 1872 (as amended) or the General Clauses Act, 1897 (as amended), as the case may be.
- 8.1.0 Parties-**The parties to the contract are the Contractor and the Purchaser, as defined in Clauses 8.0.5 and 8.0.13.
- 8.1.1.** Authority of person signing the Contract on behalf of the Contractor-A person signing the tender or any other document in respect of the Contract on behalf of the Contractor without disclosing his authority to do so shall be deemed to warrant that he has authority to bind the Contractor. If it is discovered at any time that the person so signing has



no authority to do so, the Purchaser may, without prejudice to any other right or remedy of the Purchaser, cancel the contract and make or authorize the making of a purchase of the stores at the risk and cost of such person and hold such person liable to the Purchaser for all costs and damages arising from the cancellation of the contract including any loss which the Purchaser may sustain on account of such purchase. The provisions of Clause 8.6.0 and 8.6.2 shall apply to every such purchase as far as applicable.

**8.1.2. Address of the Contractor and notices and communications on behalf of the Purchaser: -**

- (a) For all purposes of the contract, including arbitration there under, the address of the Contractor mentioned in the tender shall be the address to which all communications addressed to the Contractor shall be sent, unless the Contractor has notified change by a separate letter containing no other communication and sent by registered post acknowledgement due to the Purchaser. The Contractor shall be solely responsible for the consequence of an omission to notify a change of address in the manner aforesaid.
- (b) Any communication or notice on behalf of the Purchaser in relation to the contract may be issued to the Contractor by the Purchase Officer and all such communications and notices may be served on the Contractor either by registered posts or under certificate of posting or by ordinary post or by hand delivery at the option of such officer.

**8.2.0. Quotations of rates by Contractors**

- (a) The price quoted by the Contractor shall not be higher than the controlled price fixed by law for the stores or where there is no controlled price, it shall not exceed the prices or contravenes the norms for fixation of prices laid down by Government or where no such prices or norms have been fixed by the Government, it shall not exceed the price appearing in any agreement relating to price regulation by any industry in consultation with the Government.

In any case, save for special reasons stated in the tender, the price quoted shall not be higher than the lowest price charged by the Contractor for stores of the same nature, class or description to a private purchaser, domestic or foreign as well as Purchaser Governments.

- (b) If the price quoted is higher than the controlled price or where there is no controlled price, the price usually charged by the Contractor from a private Purchaser, domestic or foreign, as well as Purchaser Government for the stores of the same nature, class or description the Contractor will specifically mention this fact in his tender giving reasons for quoting higher price(s). If he fails to do so or makes any mis-statement, it shall be lawful for the Purchaser,



- (i) to revise the price at any stage so as to bring it in conformity with the Sub-clause (a) above or
- (ii) to terminate the contract and forfeit the Security Deposit.

#### **8.3.0. Contract.**

**8.3.1.** This contract is for the supply of the stores of the description, specifications and drawings, and in the quantities set forth in the contract on the date or dates specified therein. Unless otherwise specified, the stores shall be entirely brand new and of the best quality and workmanship to the satisfaction of the Inspecting Officer. The stores shall further be in all respects acceptable to the Inspecting Officer.

**8.3.2** Any variation or amendment of the contract shall not be binding on the Purchaser unless and until the same is duly endorsed on the contract or incorporated in a formal instrument or in exchange of letters and signed by the parties.

#### **8.4.0. Security Deposit.**

**8.4.1.** Unless otherwise agreed between the Purchaser and the Contractor, the Contractor shall, within 30 days after written notices of acceptance of the tender has been posted to the Contractor, deposit with the RailTel concerned (in cash or the equivalent in Government Securities or approved Banker's Guarantee Bond) a sum equal to 10 per cent of the total value of the stores detailed in the contract for which the tender has been accepted, as a security for the due fulfillment of the contract.

**8.4.2.** If the Contractor, having been called upon by the Purchaser to furnish security, fails to make and to maintain a security deposit within the specified period, it shall be lawful for the Purchaser -

- (a) To recover from the Contractor the amount of such security deposit by deducting the amount from the pending bills of the Contractor under the contract or any other contract with the Purchaser or any person contracting through the Purchaser or otherwise howsoever, or
- (b) To cancel the contract or any part thereof and to purchase or authorise the purchase of the stores at the risk and cost of the Contractor and in that event the provisions of Clause 8.6.2 shall apply as far as applicable.

**8.4.3.** No claim shall lie against the Purchaser in respect of interest on cash deposits or securities etc.

**8.4.4.** The Purchaser shall be entitled and it shall be lawful on his part to forfeit the said security deposit in whole or in part in the event of any default, failure or neglect on the part of the Contractor in the fulfillment or performance in all respect of the contract under reference or any other

contract with the Purchaser or any part thereof to the satisfaction of the Purchaser and the Purchaser shall also be entitled to deduct from the said deposits any loss or damage which the Purchaser may suffer or be put by reason of or due to any act or other default, recoverable by the Purchaser from the Contractor in respect of the contract under reference or any other contract and in either of the events aforesaid to call upon the Contractor to maintain the said security deposit at its original limit by making further deposits, provided further that the Purchaser shall be entitled to recover any such claim from any sum then due or which at any time thereafter may become due to the Contractor under this or any other contracts with the Purchaser.

**8.5.0. Delivery.**

**8.5.1.** The Contractor shall as may be required by the Purchaser either deliver free or CIP (Carriage & Insurance Paid) or CIF (Cost, Insurance & Freight) at the place/places detailed in the contract, the quantities of the stores detailed therein and the stores shall be delivered not later than the date specified in the contract. The delivery will not be deemed to be complete until and unless the stores are inspected and accepted by the Inspecting Officer as provided in the contract.

**8.5.2.** The Purchaser shall not be liable to render assistance to the Contractor in securing or to arrange for or provide transport to the Contractor unless it is so specifically stated in the contract.

**8.5.3.** Notwithstanding any inspection and approval by the Inspecting Officer on the Contractor's premises, property in the stores shall not pass on to the Purchaser until the stores have been received, inspected and accepted by the consignee.

**8.5.4.** No stores shall be deliverable to the consignee on Sundays and public holidays without the written permission of the consignee.

**8.6.0. Time for and Date of Delivery; the Essence of the Contract-**

The time for and the date specified in the contract or as extended for the delivery of the stores shall be deemed to be of the essence of the contract and delivery must be completed not later than the date(s) so specified or extended.

**8.6.1. Progressing of Deliveries-** The Contractor shall allow reasonable facilities and free access to his works and records to the Inspecting Officer, Progress Officer or such other Officer as may be nominated by the Purchaser for the purpose of ascertaining the progress of the deliveries under the contract.

**8.6.2. Failure and Termination:** - If the Contractor fails to deliver the stores or any installment thereof within the period fixed for such delivery in the

contract or as extended or at any time repudiates the contract before the expiry of such period the Purchaser may without prejudice to his other rights:-

- (a) recover from the Contractor as agreed liquidated damages and not by way of penalty a sum equivalent to Half per cent of the price of any stores (including elements of taxes, duties, freight, etc.) which the Contractor has failed to deliver within the period fixed for delivery in the contract or as extended for each week or part of a week during which the delivery of such stores may be in arrears where delivery thereof is accepted after expiry of the aforesaid period **The upper limit for recovery of liquidated damages will be 10% (Ten Percent) of Total contract value provided in the contractor**
- (b) Cancel the contract or a portion thereof and forfeit the security deposit or encash performance bank guarantee.
- (c) Cancel the contract or a portion thereof and if so desired purchase or authorize the purchase of the stores not so delivered or others of a similar description (where stores exactly complying with particulars are not, in the opinion of the Purchaser, which shall be final, readily procurable) at the risk and cost of the contractor.

It shall, however, be in the discretion of the Purchaser to collect or not the security deposit from the firm/firms on whom the contract is placed at the risk and expense of the defaulted firm.

Where action is taken under sub-clause (b) above, the contractor shall be liable for any loss which the purchaser may sustain on the account provided the purchase, or if there is an agreement to purchase, such agreement is made, in case of failure to deliver the stores within the period fixed for such delivery in the contract or extended within Nine months from the date of such failure and in case of repudiation of the contract before the expiry of the aforesaid period of delivery, within Nine months from the date of cancellation of the contract. The contractor shall not be entitled to any gain on such purchase and the manner and method of such purchase shall be in the entire discretion of the purchaser. It shall not be necessary for the purchaser to serve a notice of such purchase to the contractor.

**8.6.2.1 Termination for Default** - In the event of any breach of contract by the contractor, in addition to remedies available to the purchaser as above, purchaser also reserves the right to disqualify the contractor, who fails to discharge it's obligation under the contract, at any time for any specified period from future tender(s) and /or ban the business dealings with the defaulting contractor without any further notice. The decision of the purchaser shall be final and binding on the contractor.

**8.6.3 Consequence of Rejection-** If on the stores being rejected by the Consignee at the destination, the Contractor fails to make satisfactory supplies within the stipulated period of delivery, the Purchaser shall be at liberty to: -

- (i) require the Contractor to replace the rejected stores forthwith but in any event not later than a period of 21 days from the date of rejection and the Contractor shall bear all cost of such replacement including freight, if any, on such replacing and replaced stores but without being entitled to any extra payment on that or any other account, or
- (ii) Cancel the contract and forfeit security deposit/encash Performance Bank Guarantee.
- (iii) the purchaser authorize the purchase of quantity of the stores rejected or others of a similar description (when stores exactly complying with particulars are not in the opinion of the purchaser which shall be final, readily available) without notice to the contractor at his risk and cost and without affecting the contractor's liability as regards the supply of any further installment due under the contract, or

**8.7.0. Extension of Time for Delivery-**

If such failure as aforesaid shall have arisen from any cause which the Purchaser may admit as reasonable ground for extension of time, the Purchaser shall allow such additional time as he considers to be justified by the circumstance of the case, and shall forgo the whole or such part, as he may consider reasonable, of his claim for such loss or damage as aforesaid.

**8.8.0. Examination of Drawing, Specifications and Patterns-**

When tenders are called for in accordance with a drawing, specification or sealed pattern the Contractor's tenders to supply in accordance with such drawing, specifications or sealed pattern shall, be deemed to be an admission on his part that he has fully acquainted himself with the details thereof and, in no circumstances, will any claim on his part which may arise on account of his insufficient examination of the said drawing, specification or scaled pattern, be considered.

**8.9.0. Mistakes in Drawing.**

The Contractor shall be responsible for and shall pay for any alterations for the works due to any discrepancies, errors or omissions in the drawings or other particulars supplied by him whether such drawings or

particulars have been approved by the Purchaser or not provided that such discrepancies, errors or omissions be not due to inaccurate information or particulars furnished to the Contractor on behalf of the Purchaser. If any dimension figure upon a drawing or plan differ from those obtained by scaling the drawing or plan, the dimensions as figured upon the drawing or plan shall be taken as correct.

#### **8.10.0. Samples.**

**8.10.1 Advance Sample-** Where an advance sample is required to be approved under the terms of the contract, the Contractor shall submit the sample free of cost to the Inspecting Officer within the time specified in the acceptance of tender. If the Contractor is unable to do so, he must apply immediately to the Office issuing the acceptance of tender for extension of time stating the reasons for the delay. If the Purchaser is satisfied that a reasonable ground for an extension of time exists, he may allow such additional time as he considers to be justified (and his decision shall be final) with or without alteration in the delivery period stipulated in the acceptance of tender and on such conditions as he deems fit. In the event of the failure of the Contractor to deliver the advance sample by the date specified in the acceptance of tender or any other date to which the time may be extended as aforesaid by the Purchaser or of the rejection of the sample, the Purchaser shall be entitled to cancel the contract and, if so desired, purchase or authorize the purchase of the stores, in which case the provisions of Clause 8.6.0 shall apply as far as applicable.

**8.10.2.** Unless otherwise provided in the contract, all samples required for test shall be supplied by the Contractor free of cost. Where sample, which is supplied free, is rejected after examination and test, the same or whatever remains of the sample, after examination and test will be returned to the Contractor at his request and cost within three months of the date of such rejection at public tariff rate at Owner's risk.

**8.10.3. Marking-** Samples submitted shall be clearly labeled with the Contractor's name and address and the acceptance of tender number.

**8.10.4.** If the Contractor submits a sample whether with, before or after the tender, the same shall not govern the standard of supply except when it has been specifically stated so in the acceptance of tender.

**8.10.5.** Where under the contract, the Contractor is required to submit an advance sample, any expenses incurred by the Contractor on or in connection with the production of stores in bulk, before the sample has been approved unconditionally, shall be borne by the Contractor and he shall not claim any compensation in the event of such sample being found unacceptable by the Inspecting Officer.



- 8.10.6.** The rejection of the sample by the Inspecting Authority or Inspecting Officer shall be final and binding on the Contractor.
- 8.10.7.** Where the contract does not require any advance sample to be approved, the Contractor may before proceeding with bulk manufacture or delivery of the stores, if he so desires, submit to the Inspecting Officer for inspection a sample of the stores in which case a quantity not less than one per cent of the total quantity to be supplied unless otherwise authorized by the Inspecting Officer shall be submitted. The Contractor shall not, however, be entitled to be shown any consideration or give any extension of time or claim to be exonerated from completing the delivery within the stipulated period only on the ground of delay in the approval of any such sample.
- 8.11.0. Risk of Loss or Damage to Purchaser's Property.**
- 8.11.1** All the property of the Purchaser loaned whether with or without deposit on terms and conditions to be separately agreed upon in respect of each particular contract to the Contractor in connection with the contract shall remain the property of the Purchaser, as the case may be. The Contractor shall use such property for the purpose of the execution of the contract and for no other purpose whatsoever.
- 8.11.2.** All such property shall be deemed to be in good condition when received by the Contractor unless he shall have within twenty-four hours of the receipt thereof notified the Purchase Officer to the contract. If the Contractor fails to notify any defect in the condition or quality of such property he shall be deemed to have lost the right to do so at any subsequent stage.
- 8.11.3.** The Contractor shall return all such property and shall be responsible for the full value thereof to be assessed by the Purchaser whose decision shall be final and binding on the Contractor. The Contractor shall be liable for loss or damage to such property from whatever cause happening while such property is in the possession of or under the control of the Contractor, his servants, workmen, or agents.
- 8.11.4.** Where such property is insured by the Contractor against loss or fire at the request of the Purchaser such insurance shall be deemed to be effective by way of additional Precaution and shall not prejudice the liability of the Contractor as aforesaid.
- 8.12.0. Facilities for test and Examination-** The Contractor shall, at his own expense afford to the Inspecting Officer all reasonable facilities as may be necessary for satisfying himself, that the stores are being and/or have been manufactured in accordance with the particulars. The Inspecting Officer shall have full and free access at any time during the execution of the contract to the Contractor's work for the purpose aforesaid, and he may require the Contractor to make arrangements for inspection of the

stores or any part thereof or any material at his premises or at any other place specified by the Inspecting Officer and if the Contractor has been permitted to employ the services of a Sub-Contractor, he shall in his contract with the Sub-Contractor, reserve to the Inspecting Officer a similar right.

**8.12.1. Cost of Test-** The Contractor shall provide, without any extra charge, all materials, tools, labour and assistance of every kind which the Inspecting Officer may demand of him for any test and examination, other than special or independent test, which he shall require to make on the Contractor's or Consignee's Premises and the Contractor shall bear and pay all costs attendant thereon. If the Contractor fails to comply with the conditions aforesaid, the Inspecting Officer shall, in his sole judgment, be entitled to remove for test and examination all or any of the stores manufactured by the Contractor to any premises other than his (Contractor's) and in all such cases the Contractor shall bear the cost of transport and/or carrying out such tests elsewhere. A certificate in writing of the Inspecting Officer that the Contractor has failed to provide the facilities and the means, for test examination shall be final.

**8.12.2. Delivery of Stores for Test-** The Contractor shall also provide and deliver for test, free of charge, at such place other than his premises as the Inspecting Officer may specify, such material or stores as he may require.

**8.12.3. Liability for Costs of Special or Independent Test-** In the events of rejection of stores or any part thereof by the Inspecting Officer in the consequence of the sample which is removed to the laboratory or other places of test, being found on test not in conformity with the Contract and in the event of the failure of the Contractor for any reason to deliver the stores passed on test within the stipulated period, the Contractor shall, on demand pay to the Purchaser all costs incurred in the inspection and/or test. Cost of test shall be assessed at the rate charged by the laboratory to private persons for similar work.

**8.12.4. Method of Testing-** The Inspecting Officer shall have the right to put all the stores or materials forming part of the same or any part thereof to such tests as he may think fit and proper. The Contractor shall not be entitled to object on any ground whatsoever to the method of testing adopted by the Inspecting Officer.

**8.12.5. Stores Expended in Test-** Unless otherwise provided for in the contract if the test proves satisfactory and the stores or any installment thereof is accepted, the quantity of the stores or materials expended in the test will be deemed to have been taken delivery of by the Purchaser and be paid for as such.

**8.12.6. Powers of Inspecting Officer-** The Inspecting Officer shall have the power:-



- (i) Before any stores or part thereof are submitted for inspection to certify that they cannot be in accordance with the contract owing to the adoption of any unsatisfactory method of manufacture.
- (ii) To reject any stores submitted as not being in accordance with the particulars.
- (iii) To reject the whole of the installment tendered for inspection, if after inspection of such portion thereof as "he may in his discretion think fit", he is satisfied that the same is unsatisfactory.
- (iv) The Inspecting Officer's decision as regards the rejection shall be final and binding on the Contractor.

#### **8.13.0. Charges for Work Necessary for Completion of the Contract-**

The Contractor shall pay all charges for handling, stamping, painting, marking, protecting or preserving patent rights, drawings, templates, models and gauges and for all such measures as the Purchaser or the Inspecting Officer may deem necessary for the proper completion of the contract, though special provision therefore may not be made in the specification of drawings.

#### **8.14.0. Responsibility of the Contractor for Executing the Contract.**

**8.14.1. Risk in the Stores-** The Contractor shall perform the contract in all respects in accordance with the terms and conditions thereof. The stores and every constituent part thereof, whether in the possession or control of the Contractor, his agents or servants or a carrier, or in the joint possession of the Contractor, his agents or servants and the Purchaser, his agents or servants, shall remain in every respect at the risk of the Contractor, until their actual delivery to the consignee at the stipulated place or destination or, where so provided in the acceptance of tender, until their delivery to a person specified in the contract as interim consignee for the purpose of dispatch to the consignee. The Contractor shall be responsible for all loss, destruction, damage or deterioration of or to the stores from any cause whatsoever while the stores after approval by the Inspecting Officer are awaiting dispatch or delivery or are in the course of transit from the Contractor to the consignee or, as the case may be, interim consignee. The Contractor shall alone be entitled and responsible to make claims against a RailTel Administration or other carrier in respect of non-delivery, short delivery, mis-delivery, loss, destruction, damage or deterioration of the goods entrusted to such carrier by the Contractor for transmission to the consignee or the interim consignee as the case may be.

**8.14.2. Consignee's Right of Rejection** – Notwithstanding any approval which the Inspecting Officer may have given in respect of the stores or any materials or other particulars or the work or workmanship involved in the performance of the contract (whether with or without any test carried out by the Contractor or the Inspecting Officer or under the direction of the

Inspecting Officer) and notwithstanding delivery of the stores where so provided to the interim consignee, it shall be lawful for the consignee, on behalf of the Purchaser, to reject the stores or any part, portion or consignment thereof within a reasonable time after actual delivery thereof to him at the place or destination specified in the contract if such stores or part, portion or consignment thereof is not in all respects in conformity with the terms and conditions of the contract whether on account of any loss, deterioration or damage before dispatch or delivery or during transit or otherwise howsoever.

**Note-** In respect of materials pre-inspected at the firm's premises the consignee will issue rejection advice within 90 days from the date of receipt.

**8.14.3.** Provided that where, under the terms of the contract the stores are required to be delivered to an interim consignee for the purpose of dispatch to the consignee, the stores shall be at the Purchaser's risk after their delivery to the interim consignee, but nevertheless it shall be lawful for the consignee on behalf of the Purchaser to reject the stores or any part, portion of consignment thereof upon their actual delivery to him at the destination if they are not in all respects in conformity with the terms and conditions of contract except where they have been damaged or have deteriorated in the course of transit or otherwise after their delivery to the interim consignee.

**8.14.4.** The provisions contained in Clause 8.19.0 relating to the removal of stores rejected by the Inspecting Officer shall mutatis mutandis apply to stores rejected by the consignee as herein provided.

**Note-** In respect of stores inspected during manufacture or before delivery or dispatch at contractor's premises the consignee will issue communication of rejection within 90 days from the date of actual delivery thereof.

**8.14.5. Subletting and Assignment-** The Contractor shall not, save with the previous consent in writing of the Purchaser, sublet, transfer or assign the contract or any part thereof or interest therein or benefit or advantage thereof any manner whatsoever.

In the event of the Contractor's subletting or assigning this contract or any part thereof without such permission, the Purchaser shall be entitled to cancel the contract and to purchase the stores elsewhere on the Contractor's account and risk and the Contractor shall be liable for any loss or damage which the Purchaser may sustain in consequence or arising out of such purpose.

**8.14.6. Changes in a Firm:-**

- a) Where the Contractor is a partnership firm, a new partner shall not be introduced in the firm except with the previous consent in writing of the

Purchaser, which may be granted only upon execution of a written undertaking by the new partner to perform the contract and accept all liabilities incurred by the firm under the contract prior to the date of such undertaking.

- b) On the death or retirement of any partner of the Contractor firm before complete performance of the contract, the Purchaser may, at his option, cancel the contract and in such case the Contractor shall have no claim whatsoever to compensation against the Purchaser.
- c) If the contract is not determined as provided in Sub-clause (b) above notwithstanding the retirement of a partner from the firm he shall continue to be liable under the contract for acts of the firm until a copy of the public notice given by him under Section 32 of the Partnership Act, has been sent by him to the Purchaser by registered post acknowledgement due.
- d) **Consequence of breach** - Should a partner in the Contractor firm commit a breach of Sub-clause 8.14.5 above or the Contractor should commit a breach of the conditions 8.14.6 (a) of this Sub-clause, it shall be lawful for the Purchaser to cancel the contract and purchase or authorize the purchase of the stores at the risk and cost of the Contractor and in that event the provisions of Clauses 8.5.0 and 8.6.0 as far as applicable shall apply.
- e) The decision of the Purchaser as to any matter or thing concerning or arising out of this sub-clause or on any question whether the Contractor or any partner of the Contractor firm has committed a breach of any of the conditions in this sub-clause contained shall be final and binding on the Contractor.

#### **8.15.0. Indemnity.**

**8.15.1.** The Contractor shall at all times indemnify the Purchaser against all claims which may be made in respect of the stores for infringement of any right protected by patent, registration of designs or trade mark. Provided always that in the event of any claim in respect of alleged breach of letters patent, registered designs or trade mark being made against the Purchaser, the Purchaser shall notify the Contractor of the same and the Contractor shall, at his own expense, either settle any such dispute or conduct any litigation that may arise there from.

**8.15.2.** The Contractor shall not be liable for payment of any royalty, license fee or other expenses in respect of or for making use of patents or designs with respect to which he is according to the terms of the contract, to be treated as an agent of the Government for the purpose of making use of patent or trade mark for fulfillment of the contract.

#### **8.16.0. Packing.**

- 8.16.1.** The Contractor shall pack at his own cost the stores sufficiently and properly for transit by rail/road, air and/or sea as provided in the contract so as to ensure their being free from loss or damage on arrival at their destination.
- 8.16.2.** Unless otherwise, provided in the contract all containers (including packing cases, boxes, tins, drums and wrappings) in which the stores are supplied by the contractor, shall be considered as non-returnable and their cost as having been included in the contract price.
- 8.16.3.** If the contract provides that the containers shall be returnable, they must be marked "Returnable" and they will be returned to the Contractor as per terms of the contract.
- 8.16.4.** If the contract provides that returnable containers shall be separately charged, they shall be invoiced by the Contractor at the price specified in acceptance of tender. In such cases, the Contractor shall give full credit for the invoiced amount if the containers are returned to the Contractor. Return of containers shall be made within a reasonable time and in the event of any dispute or difference arising as to whether the containers were so returned, the decision of the Purchaser thereon shall be final and binding and the Purchaser may, in his discretion award, such compensations as may in his opinion be proper for any undue delay in returning the containers.
- 8.16.5.** Each bale or package delivered under the contract shall be marked by the Contractor or at his own expense. Such marking shall be distinct (all previous irrelevant marking being carefully obliterated) and shall clearly indicate the description and quantity of the stores, the name and address of the Consignee, the gross weight of the package and the name of the Contractor with a distinctive number or mark sufficient for the purpose of identification. All markings shall be carried out with such material as may be found satisfactory by the Inspecting Officer as regards quickness of drying, fastness and indelibility.
- 8.16.6.** The Inspecting Officer may reject the stores if the stores are not packed/or marked as aforesaid and in case where the packing materials are separately prescribed, if such materials are not in accordance with the terms of the contract. Such rejection of the stores by the Inspecting Officer shall be final and binding on the Contractor.
- 8.16.7.** Each bale or package shall contain a packing note specifying the name and address of the Contractor, the number and date of the acceptance of tender or supply order and the designation of the Purchase Officer issuing the supply order, the description of the stores and the quantity contained in such bale or package.

**8.17.0 Notification of Delivery.**

Notification of delivery or dispatch in regard to each and every installment shall be made to the consignee and to the indent or immediately on dispatch or delivery. The Contractor shall further supply to the consignee, or the interim consignee, as the case may be, a packing account Quoting number of the acceptance of tender and/or supply or repeat and date of dispatch of the stores. All packages, containers, bundles and loose materials part of each and every installment shall be fully described in the packing account and full details of the contents of the packages and quantity of materials shall be given to enable the consignee to check the stores on arrival at destination. The Railway Receipt/Consignment Note or Bill of Lading, if any, shall be forwarded to the consignee by registered post immediately on the dispatch of stores. The Contractor shall bear and reimburse to the Purchaser demurrage charges, if any, paid by reason of delay on the part of the Contractor in forwarding the Railway Receipt, Consignment Note or Bill of Lading.

#### **8.18.0. Progress Reports.**

- 8.18.1.** The Contractor shall from time-to-time, render such reports concerning the progress of the contract and/or supply of the stores in such form as may be required by the Purchaser.
- 8.18.2.** The submission, receipt and acceptance of such reports shall not prejudice the rights of the Purchaser under the contract, nor shall operate as an estoppel against Purchaser merely by reason of the fact that he has not taken notice of/or subjected to test any information contained in such report.

#### **8.19.0. Removal of Rejected Stores.**

- 8.19.1.** On rejection of all stores submitted for inspection at a place other than the premises of the Contractor, such stores shall be removed by the Contractor at his own cost subject as hereinafter stipulated, within 21 days of the date of intimation of such rejection. If the concerned communication is addressed and posted to the Contractor at the address mentioned in the contract, it will be deemed to have been served on him at the time when such communication would be in the course of ordinary post reach the Contractor. Provided that the Inspecting Officer may call upon the Contractor to remove dangerous, infected or perishable stores within 48 hours of the receipt of such communication and the decision of the Inspecting Officer in this behalf shall be final in all respects.

Provided further that where the price or part thereof has been paid, the consignee is entitled without prejudice to his other rights to retain the rejected stores till the price paid for such stores is refunded by the Contractor save that such retention shall not in any circumstances be deemed to be acceptance of the stores or waiver of rejection thereon.



**8.19.2.** All rejected stores shall in any event and circumstances remain and always be at the risk of the Contractor immediately on such rejection. If such stores are not removed by the Contractor within the periods aforementioned, the Inspection Officer may remove the rejected stores and either return the same to the contractor at his risk and cost by such mode of transport as the Purchaser or Inspecting Officer may decide, or dispose of such stores at the Contractor's risk and on his account and retain such portion of the proceeds, if any from such disposal as may necessary to recover any expense incurred in connection with such disposals (or any price refundable as a consequence of such rejection). The Purchaser shall, in addition, be entitled to recover from the Contractor ground rent/demurrage charges on the rejected stores after the expiry of the time limit mentioned above.

**8.19.3.** The stores that have been dispatched by road or courier and rejected after arrival at destination may be taken back by the Contractor either at the station where they were rejected or at the station from which they were sent, after refunding the price paid for such stores and other charges refundable as a consequence of such rejection. If the contract placed for delivery FOR station of dispatch, the Contractor shall pay the carriage charges on the rejected consignment at public tariff rates from the station of dispatch to the station where they are rejected. If the Contractor elects to take back the goods at the station from which they were dispatched, the goods shall in addition, be booked back to him freight to pay at public tariff rates and at owner's risk. The Contractor shall be liable to reimburse packing and incidental costs and charges incurred in such return or rejected stores in addition to other charges refundable as a consequence of rejection. The goods shall remain the property of the Contractor unless and until accepted by the Purchaser, after inspection.

#### **8.20.0. System of Payment.**

**8.20.1.** Unless otherwise agreed upon between the parties, payment for delivery of the stores will be made on submission of bills in the prescribed form which may be obtained from the Purchase Officer in accordance with the instructions given in the acceptance of Tender, by RTGS/NEFT as may be decided by the Purchaser.

**8.20.2.** Payment for the stores or for each consignment thereof will be made to the Contractor on submission of bills accompanied by required document in accordance with the mutually agreed terms & conditions, procedure has been agreed to by the Purchaser.

**8.20.3.** In all other contracts or in contracts where the Inspecting Officer also acts as the interim consignee or where inspection is carried on by the Consignee himself at destination and in all cases of local delivery full payment shall be made on submission of " Final 100 percent bill "

supported by the Inspection Certificates and consignee's receipt as aforesaid to the Accounts Officer concerned.

#### **8.21.0. Withholding and lien in respect of sums claimed.**

**8.21.1.** Whenever any claim or claims for payment of a sum of money arises out of or under the contract against the Contractor, the Purchaser shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any, deposited by the Contractor and for the purpose aforesaid, the Purchaser shall be entitled to withhold the said cash security deposit or the security, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the Contractor, the Purchaser shall be entitled to withhold and have lien to retain to the extent of the such claimed amount or amounts referred to supra, from any sum or sums found payable or which at any time-thereafter may become payable to the Contractor under the same contract or any other contract with the Purchaser pending finalization or adjudication of any such claim.

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above, by the Purchaser will be kept withheld or retained as such by the Purchaser till the claim arising out of or under the contract is determined by the Arbitrator (if the contract is governed by the arbitration clause) or by the competent court as prescribed under clause 8.24.3 hereinafter provided, as the case may be, and that the Contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to supra and duly notified as' such to the Contractor.

**8.21.2.** For the purpose of Clause 8.21.1, where the Contractor is a partnership firm or a limited company, the Purchaser shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company, as the case may be, whether in his individual capacity or otherwise.

#### **8.21.3. Lien in respect of Claims in other Contracts**

- (a) Any sum of money due and payable to the Contractor (including the security deposit returnable to him) under the contract may withhold or retain by way of lien by the Purchaser or RailTel against any claim of the Purchaser or RailTel in respect of payment of a sum of money arising out of or under any other contract made by the Contractor with the Purchaser or RailTel.



- (b) It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Purchaser or RailTel will be kept withheld or retained as such by the Purchaser or RailTel till his claim arising out of the same contract or any other contract is either mutually settled or determined by the arbitrator, if the contract is governed by the arbitration clause or by the competent court under Clause 8.24.3 hereinafter provided, as the case maybe, and that the Contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the Contractor.

#### **8.22.0. Corrupt Practices**

**8.22.1.** The contractor shall not offer or give or agree to give to any person in the employment of the purchaser or working under the orders of the Purchaser any gift or consideration of any kind as an inducement or reward for doing on for bearing to do or for having done or forborne to do any act in relation to the obtaining execution of the contract or any other contract with the Purchaser or for showing any favour or for bearing to show disfavor to any person in relation to the contract or any other contract with the Purchaser. Any breach of the aforesaid condition by the contractor or any one employed by him or acting on his behalf (whether with or without the Knowledge of the contractor) or the commission of any offence by the contractor or by any one employed by him or acting on his behalf under Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act, 1947 or any other Act enacted for the prevention of corruption by public servants shall entitle the Purchaser to cancel the contract and all or any other contracts with the contractor and to recover from the contractor the amount of any loss arising from such cancellation in accordance with the provisions of Clauses 8.5.0 and 8.6.0.

**8.22.2.** Any dispute or difference in respect of either the interpretation effect or application of the above condition or of the amount recoverable there under by the Purchaser from the contractor, shall be decided by the Purchaser, whose decision thereon shall be final and binding on the contractor.

#### **8.23.0. Insolvency and Breach of Contract.**

**8.23.1.** The Purchaser may at any time, by notice in writing summarily determine the contract without compensation to the Contractor in any of the following events, that is to say:

- (a) If the Contractor being an individual or if a firm, any partner thereof, shall at any time, be adjudged insolvent or shall have a receiving order or order for administration of his estate made against him or shall take any

proceeding for composition under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or enter into any assignment or composition with his creditors or suspend payment or if the firm be dissolved under the Partnership Act, **or**

- (b) If the Contractor being a company is wound up voluntarily or by the order of a Court or a Receiver, Liquidator or Manager on behalf of the Debenture-holders is appointed or circumstances shall have arisen which entitle the Court or Debenture holders to appoint a Receiver, Liquidator or Manager, **or**
- (c) If the Contractor commits any breach of the contract not herein specifically provided for. Provided always that such determination shall not prejudice any right of action or remedy which shall have accrued or shall accrue thereafter to the Purchaser and provided also the Contractor shall be liable to pay to the Purchaser for any extra expenditure he is thereby put to and Contractor shall, under no circumstances, be entitled to any given on re-purchase.

#### **8.24.0. Laws governing the Contract.**

**8.24.1.** This contract shall be governed by the Laws of India for the time being in force.

**8.24.2.** Irrespective of the place of delivery, the place of performance or place of payment under the contract, the contract shall be deemed to have been made at the place from which the acceptance of tender has been issued.

**8.24.3. Jurisdiction of courts-** This Courts of the place from where the acceptance of tender has been issued shall alone have jurisdiction to decide any dispute arising out of or in respect of the contract.

**8.24.4. Marking of stores-** The marking of the stores must comply with the requirements of the laws relating to merchandise marks for the time being in force in India.

#### **8.24.5. Compliance with provisions of Contract Labour (Regulation and Abolition) Act, 1970:**

- 1) The Contractor shall comply with the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the Contractor Labour (Regulation and Abolition) Central Rules, 1971, as modified from time-to-time, wherever applicable and shall also indemnify the Purchaser 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 contract and continue to have a valid license until the completion of the contract. Any failure to fulfill this requirement shall attract the penal provisions of the contract arising out of the resultant non-execution of the contract.
- 3) The Contractor shall pay to 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 contract including any engaged by his Sub-Contractors in connection with the said contract, as if the labour had been immediately employed by him.
- 4) In respect of all labour directly or indirectly employed in the contract 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 Purchaser is obliged to pay any amount of wages to a workman employed by the Contractor or his Sub-Contractor in execution of the contract 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 on account of the contingent liability of the Purchaser due to the Contractor's failure to fulfill his statutory obligations under the aforesaid Act or the Rules the Purchaser 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 Purchaser under Section 20, Sub-section (2) and Section 21, Sub-section (4) of the aforesaid Act, the Purchaser 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 Purchaser to the Contractor whether under the contract or otherwise. The Purchaser shall not be bound to contest any claim made against it under Sub-section (i) 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 Purchaser full security for all costs for which the Purchaser might become liable in contesting such claim. The decision of the Purchaser regarding the amount actually recoverable from the Contractor as stated above, shall be final and binding on the Contractor.

#### **8.25.0. Headings.**

The headings of conditions hereto shall not affect the construction thereof.

### **8.26.0 Settlement of Disputes/ Arbitration**

- 1) Any dispute or difference whatsoever arising between the parties out of or relating to the construction, meaning, scope, operation or effect of this contract or the validity or the breach thereof shall be settled by arbitration in accordance with the 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 at New-Delhi.
- 2) All arbitration proceedings shall be conducted in English. Recourse against any arbitral award so rendered maybe entered into court having jurisdiction or application may be made to such court for the order of enforcement as the case may be.
- 3) The Arbitral Tribunal shall consist of the Sole Arbitrator appointed by CMD/RailTel Corporation Of India Limited, if the value of claim is up to Rs. 10 lakh. If the value of the claim or amount under dispute is more than Rs. 10 Lakhs, the matter shall be referred to the adjudication of arbitral council. Chairman Managing Director (CMD) of RailTel Corporation shall furnish a panel of three names to the contractor, out of which, contractor will recommend one name to be his nominee and then CMD/RailTel shall appoint one name as RailTel's nominee and these two arbitrators with mutual consent shall appoint a third arbitrator who shall act as the deciding arbitrator in terms of Arbitration and Conciliation Act. The award of the sole arbitrator or the Arbitral council, as the case may be, shall be final and binding on both the parties. Each of the parties agree that notwithstanding that the matter may be referred to Arbitrator as provided herein, 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.

### **8.27.0. Inspection & Rejection:-**

Where under a contract the price payable is fixed on FOR station of dispatch basis, the Contractor shall, if the consignee rejects the stores at destination be liable in addition to his other liabilities, to reimburse to the Purchaser the freight paid by the Purchaser.

**8.27.1 Notification of Result of inspection.-** Unless otherwise provided in the specification of schedule, the examination of the stores will be made as soon as practicable after the same have been submitted for inspection and the result of the examination will be notified to the Contractor.

**8.27.2 Inspection Notes.--**On the stores being found acceptable by the inspecting Officer he shall furnish the Contractor with necessary copies of Inspection Notes duly completed, for being attached to the Contractor's bill in support thereof.

## 8.28.0 Warranty/Guarantee

- 8.28.1 The supplier shall warrant that material to be supplied shall be new and free from all defects and faults in material, workmanship, manufacture and shall be of the highest grade consistent with the established and generally accepted standards of materials for the type ordered and shall perform in full conformity with the specifications and drawings. The supplier shall be responsible for any defects (with respect to the specification of the material) that may develop subsequently under the conditions provided in the contract under proper use, arising out of faulty materials, design or workmanship such as corrosion, inadequate quantity of material to meet equipment requirements, 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.
- 8.28.2 If it becomes necessary for the contractor to replace or renew any defective portion/portions of the supplies under this clause, the provisions of the clause shall apply to the portion/portions of the equipment/ material so replaced or renewed or until the end of the above mentioned period, whichever may be later. If any defect is not remedied within a reasonable time, the Purchaser may proceed to do the work at the contractor's risk and expenses, but without prejudice to any other rights which the Purchaser may have against the contractor in respect of such defects.
- 8.28.3 Replacement under warranty clause shall be made by the contractor free of all charges at site including freight, insurance and other incidental charges.
- 8.28.4 The Contractor/Seller hereby covenants that it is a condition of the contract that all goods/stores/articles furnished to the Purchaser under this contract shall be of the highest grade free of all defects and faults and of the best materials, quality, manufacture and workmanship throughout and consistent with the established and generally accepted standards for materials of the type ordered and in full conformity with the contract specification, drawing or sample, if any and shall, if operable, operate properly.
- 8.28.5 The Contractor also guarantees that the said goods/stores/articles would continue to conform to the description and quality as aforesaid, for a period as mentioned in **BID data sheet** after their delivery or after a period as mentioned in BID data sheet from the date of placement in service whichever shall be sooner, and this warranty shall survive notwithstanding the fact that the goods/stores/articles may have been inspected, accepted and payment thereof made by the Purchaser.
- 8.28.6 If during the aforesaid period, the said goods/stores/articles be discovered not to conform to the description and quality aforesaid or have



deteriorated, otherwise that by fair wear and tear the decision of the Purchaser in that behalf being final and conclusive that the Purchaser will be entitled to reject the said goods/stores/articles or such portions thereof as may be discovered not to conform to the said description and quality. On such rejection, the goods/stores/articles will be at the Seller's risk. If the Contractor/Seller so desires, the rejected goods may be taken over by him or his agents for disposal such manner as he may deem fit within a period of 3 months from the date of such rejection. At the expiry of the period, no claim whatsoever shall lie against the **Purchaser** in respect of the said goods/stores/articles, which may be disposed of by the Purchaser in such manner as he thinks fit. Without prejudice to the generality of the foregoing, all the provisions in the Standard Conditions of Contract relating to the 'rejection of stores' and 'failure' and 'termination' and Clause 8.27.0- 2 above shall apply.

8.28.7 The Contractor/Seller shall, if required, replace the goods or such portion thereof as have been rejected by the Purchaser, free of cost, at the ultimate destination, or at the option of the Purchaser, the Contractor/Seller shall pay to the Purchaser, the value thereof at the contract price and such other expenditure and damage as may arise by reason of the breach of the conditions hereinbefore specified. Nothing herein contained shall prejudice any other right of the Purchaser in that behalf under this contract or otherwise.

#### **8.29.0. Inspection at the Fag end of the Delivery Period-**

In cases where only a portion of the stores ordered is tendered for inspection at the Fag end of the delivery period and also in cases where inspection is not completed in respect of the portion of the stores tendered for inspection during the delivery period, the Purchaser reserves the right to cancel the balance quantity not tendered for inspection within the delivery period fixed in the contract at the risk and expense of the Contractor without any further reference to him. If the stores tendered for inspection during or at the fag end of the delivery period are not found acceptable after carrying out the inspection, the purchaser is entitled to cancel the contract in respect of the same at the risk and expense of the contractor. If, however, the stores tendered for inspection are found acceptable, the Purchaser may grant an extension of the delivery period subject to the following conditions:

- (a) The Purchaser has the right to recover from the contractor under the provision of clause 8.6.2 (a) of Standard Conditions of Contract liquidated damages on the stores which the Contractor has failed to deliver within the period fixed for delivery.
- (b) That no increase in price on account of any statutory increase in or fresh imposition of Customs Duty, Excise Duty, Sales Tax on account of Foreign Exchange variation or on account of any other tax or duty leviable in respect of stores specified in the contract which takes place

after the date of the delivery period stipulated in the contract shall be admissible on such of the said stores as are delivered after the date of the delivery stipulated in the contract.

- (c) That notwithstanding any stipulation in the contract for increase in price on any other ground no such increase which takes place after the date of the delivery stipulated in the contract shall be admissible on such of the said stores as are delivered after the expiry of the delivery period stipulated in the contract.
- (d) But nevertheless, the Purchaser shall be entitled to the benefit of any decrease in price on account of reduction in or remission of Custom Duty, Sales Tax or on account of Foreign Exchange variation or on account of any other Tax or Duty or on other ground as stipulated in the price variation, clause which takes place after the expiry of the date of delivery period stipulated in the contract.

**8.29.1.** The Contractor shall not dispatch the Stores till such time as an extension in terms of para 8.29.0 (a) to (d) above is granted by the Purchaser and accepted by the Contractor. If the stores are dispatched by the Contractor before an extension letter as aforesaid is issued by the Purchaser and the same are accepted by the Consignee, the acceptance of the stores shall be deemed to be subject to the conditions (a) to (d) mentioned in the paragraph 8.29.0 above.

**8.29.2.** In case where the some or the entire quantity has not been tendered for inspection with in the delivery period stipulated in the contract and the Purchaser chooses to grant an extension of the delivery period the same would be subject to conditions (a) to (d) mentioned in the paragraph 8.29.0 above.

#### **8.30.0. Additional Conditions:-**

These (special) conditions wherever they differ from the Invitation to Tender and Instruction to Tenderers over ride the latter.

In addition to those conditions, the following special conditions shall govern the Rate/Running contract and all supply orders placed under it:-

Additional (Special Conditions):

1. **Purpose of Contract:** The contract, which shall be deemed to be a Rate /Running contract is intended for the supply of the Stores of the descriptions set forth in the Scheduled to Tender during the period therein specified.
2. **Period of Contract:** Unless otherwise indicated in the schedule, the period of contract shall be one year from the date of acceptance of offer.



3. The Purchaser may authorize any officer (who shall hereinafter be called Direct Demanding Officer) at any time during the period of the contract, to place orders, called supply orders direct on the Contractor. The Contractor shall deliver or dispatch the full quantity of the stores so ordered by the Purchaser or the Direct Demanding Officer within the period specified in the contract or as mutually agreed to.
4. **Number or quantity contracted for** – subject as hereinafter mentioned, no guarantee can be given as to the number or quantity of the stores which will be ordered during the period of the rate contract which is only in the nature of a standing offer from the Contractor. But the purchaser undertakes to order from the contractor all stores as detailed in the contract which he requires to purchase during the period of the contract except that he reserves the right (1) of submitting to competition any supply of Stores included in the contract, (2) of placing rate contracts simultaneously or at any time during its period with one or more contractors as he may think fit, and (3) of obtaining from any source any stores referred to in the contract to meet any emergency if the Purchaser (whose decision shall be final) is satisfied that the contractor is not in a position to supply specific quantities within the period in which supplies are required.
5. **Minimum/maximum order value** - The value of any single supply order shall not be less than one unit and not more than the estimated quantity subject to provision of the contract.
6. **Delay or default** in supplies either in part or in full entitles the Purchaser, in addition to other remedies, not to order any further quantities on the contractor even up to any quantities indicated in the contract.
7. **Fall Clause:**
  - I. The price charged for the stores under the contract by the Contractor shall in no event exceed the lowest price at which the contractor sells the Stores or offers to sell stores of identical description to any person / organizations including the purchaser or any Department of the Central Government or any Department of a State Government or any statutory undertaking of the Central or State Government, as the case may be during the period till the performance of all Supply orders placed during the currency of the Advance Purchase Order/rate contract is completed.
  - II. If at any time, during the said period, the contractor reduces the sales price, sells or offers to sell such Stores to any person / organization including the purchaser or any Department of central Government or any Department of the State Government or any statutory undertaking of the Central or State Government as the case may be, at a price lower than the price chargeable under the contract, he shall forthwith notify such reduction in sales price to the Purchaser and the price payable under the contract for the Stores

supplied after the date of coming into force of such reduction shall stand correspondingly reduced, the above stipulation will, however, not apply to:

- (a) Export/Deemed Exports by the contractor,
  - (b) Sale of goods such as drugs which have expiry dates, and
- III. The contractor shall furnish the following Certificate to the bill paying officer along with each bill for payment of supplies made against the contract:

"I/We certify that there has been no reduction in sale price of the Stores of description identical to the stores supplied under the contract herein and such stores have not been offered & sold by me/us to any person/organization including the purchase or any Department of Central Government or any Department of State Government or any statutory Undertaking of the Central or State Government as the case may be, up to the date of bill/ the date of completion of supplies against all supply orders placed during the currency of the contract at a price lower than the price charged to the purchaser under the contract except for quantity of Stores categorized under sub-clauses (a), (b), of sub-para II above, details of which are as follows: ".

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RAILTEL

## Chapter 9

### Performa for Performance Bank Guarantee

#### PERFORMANCE BANK GUARANTEE BOND

(On Stamp Paper of Rs one hundred)

(To be used by approved Scheduled Banks)

In consideration of the RailTel Corporation of India Limited, : Plate-A, 6th Floor, Office Block-2, NBCC Building, East Kidwai Nagar, New Delhi-110023

1. (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, or 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 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

3. 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. ....

4. We, ..... bank undertake to pay to the RailTel any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) / Supplier(s) in any suit or proceedings pending before any court or Tribunal relating thereto our liability under this present being, absolute and unequivocal.

The payment so made by us under this Bond shall be a valid discharge of our liability for payment there under and the Contractor(s) / Supplier(s) shall have no claim against us for making such payment.

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 ..... (1) ..... We shall be discharged from all liability under this Guarantee thereafter.

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 or 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 effect of so relieving us.

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

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

**Dated the day of 2019**

for .....

(indicate the name of the Bank)

**Witness**

1. Signature

Name

2. Signature

Name

\*\*\*\*\*

## Chapter 10

### Check List

SN	Have you submitted the following documents?	Submitted /complied or Not	PageNo/refno.of Offer
1	Cost of tender document		
2	Power of Attorney		
3	Downloaded tender document digitally signed.		
4	Earnest money amounting Rs -----/- as per bid data sheet- clause no. 6.4 Chapter 6.		
5	Valid TAC/TSEC Approval Certificate as per Specification number for the material as per bid data sheet.		
6	Documents required as per clause no. 3.3 of eligibility criteria of chapter 3		
7	Performance statement including Copies of Purchase Orders & Inspection certificates as per clause 6.10 (i) Chapter 6.		
8	Compliance statement for acceptance of Technical specification (Chapter 4) & Instructions and Tender Conditions (Chapter 3,6,7,8).		
9	Deviation Statement, if any,(Chapter wise and Clause wise ) from Technical Specification & Tender conditions.		
10	Cost breakup of price indicating Basic rate, freight, GST. Chapter 2.		

\*\*\*\*\*END OF THE DOCUMENT \*\*\*\*\*

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