# **RailTel Corporation of India Limited**

(A Govt. Of India Enterprise)
EASTERN REGION,
3<sup>RD</sup> FLOOR, 33A, CHATTERJEE INTERNATIONAL CENTRE,
J. L. NEHRU ROAD, KOLKATA – 700 071
PH. NO. 033-4400-9999, 4404-1499, FAX: 033-44041490

# रेलटेल कारपोरेशन आफ इंडिया लिमिटेड

# Open E-Tender No: RailTel/Tender/OT/ER/HQ/2018-19/1067-73 Dated. 01.01.2019

खुली ई—निविदा संख्याः रेलटेल / टेंडर / ओटी / ईआर / एचक्यू / 2018—19 / 1067-73 दिनांकः 01.01.2019



# OPEN E-TENDER DOCUMENT FOR THE WORK OF

"Deployment of maintenance teams for maintenance of optic fibre cable network and upkeep of associated gears like AC, DG, Stabilizer, Change over unit, Shelter and Wi-Fi Equipments in Cuttack, Bhubaneswar, Rangiya, Guwahati, Lumding, Jorhat & Tikiri Sections of RCIL/ER"

"रेलटेल / पूर्वी क्षेत्र के कटक, भुबनेश्वर, रंगिया, गुवाहाटी, लमडिंग, जोरहाट एवं टिकिरी अनुभाग में ओएफसी तंत्र के अनुरक्षण एवं इससे जुड़े अन्य उपकरणों जैसे एसी, डीजी, स्टेबिलाइजर, चैंज ओवर यूनिट, शैल्टर एवं वाई—फाई उपकरणों की देखभाल हेतु अनुरक्षण दल की तैनाती"

के लिए खुला ई-निविदा दस्तावेज

Cost of Tender Document: Rs. 5,900/- only (Incl. GST)

निविदा दस्तावेज की कीमतः रु. 5900 / –मात्र (जी.एस.टी. सहित)



# रेलटेल कारपोरेशन आफ इंडिया लिमिटेड

पूर्वी क्षेत्र, ततीय तल, 33ए, चटर्जी अंर्तराटीय केंद्र, जे. एल. नेहरु मार्ग, कोलकाता—700071, रुभाष संख्याः 033—44009999, 44041499, फेक्सः 033—440414

ई—निविदा संख्याः रेलटेल / टेंडर / ओटी / ईआर / एचक्यू / 2018–19 / 1067-73, दिनांकः 01.01.2019

रेलटेल कारपोरेशन आफ इंडिया लिमिटेड, द्वारा रेलटेल / पूर्वी क्षेत्र के कटक, भुबनेश्वर, रंगिया, गुवाहाटी, लमडिंग, जोरहाट एवं टिकिरी अनुभाग में ओएफसी तंत्र के अनुरक्षण एवं इससे जुड़े अन्य उपकरणों जैसे एसी, डीजी, स्टेबिलाइजर, चैंज ओवर यूनिट, शैल्टर एवं वाई—फाई उपकरणों की देखभाल हेतु अनुरक्षण दल की तैनाती के लिए दो पैकेट प्रणाली में शामिल होने के लिए ई—निविदा आमंत्रित की जाती है। इच्छुक निविदाकर्ता, ई—निविदाये नीचे दिए गए नियमों व कार्यक्रम के अनुसार जमा करे।

क)	1) E- <b>निविदा</b> प्रकाशित होने की तिथि/समय	07.01.2019
	2) निविदा डाउनलोडिंग शुरू होने की तिथि/समय	08.01.2019 11:00 बजे से
	3) निविदा डाउनलोडिंग बंद होने की तिथि/समय	06.02.2019 17:00 बजे तक
	4) स्पष्टीकरण देने की तिथि/समय शुरू	15.01.2019 11:00 बजे से (आफलाइन)
	5) स्पष्टीकरण देने की तिथि/समय बंद	15.01.2019 17:00 बजे तक (आफलाइन)
	6) निविदा जमा देने का तिथि/समय शुरू	08.01.2019 11:00 बजे से (ऑनलाइन)
ख)	निविदा जमा देने की तिथि/समय बंद	07.02.2019 15:00 बजे तक (ऑनलाइन)
ग)	ई—दस्तावेजो को खोला जाना	07.02.2019 15:30 बजे (ऑनलाइन)
ध)	निविदा का अनुमानित मूल्य	अनुलग्नक-ए के अनुसार
च)	धरोहर राशि (ईएमडी)#	अनुलग्नक-ए के अनुसार
छ)	निविदा दस्तावेज की कीमत#	रु. 5900 / –प्रति निविदा अनुभाग( जी.एस.टी. सहित)
ज)	प्रस्ताव की वैधता	खुलने के 60 दिन तक

#ये बैंक ड्राफ्ट द्वारा, रेलटेल कारपोरेशन आफ इंडिया लिमिटेड, कोलकाता के पक्ष में देय होगा।

- \* यदि निविदा दस्तावेज को वेबसाइट से डाउनलोड किया जाता है तब निविदा दस्तावेज की कीमत(जैसा की ऊपर कहा गया है), ऑफर के साथ डिमांड ड्राफ्ट के रूप में जमा की जाएगी | ये डिमांड ड्राफ्ट भारत के किसी भी राष्ट्रीयकृत/ अनुसूचित बैंक का हो सकता है जो रेलटेल कारपोरेशन आफ इंडिया लिमिटेड, कोलकाता के पक्ष में देय होगा।
- # सिंगल पॉइंट पंजीकरण के तहत NSIC से मान्यता प्राप्त लघु उद्योगों को निविदा दस्तावेज व धरोहर राशि (ईएमडी) का मूल्य जमा कराने से छूट दी जाती है।

नोट:- निविदा सूचना और निविदा दस्तावेज वेबसाइट <u>www.railtelindia.com</u> तथा e-Tendering Portal <a href="https://www.tcil-india-electronictender.com">https://www.tcil-india-electronictender.com</a> पर उपलब्ध रहेंगे जिसे निविदाकर्ता डाउनलोड कर सकते हैं लेकिन निविदा केवल इ-टेंडिएंग द्वारा TCIL Portal https://www.tcil-india-electronictender.com पर ONLINE ही स्वीकार कि जाएँगी | निविदाकर्ता को E- निविदा जमा कराने के लिए TCIL Website से एक अधिकृत इ-दस्तावेज डाउनलोड करना आवश्यक है. Corrigendum /addendum /amendments सम्बंधित जानकारी केवल TCIL Portal पर ही उपलब्ध होंगी. निविदा दस्तावेज कि छपी हुई प्रति बिक्री के लिए उपलब्ध नहीं होगी.

निविदा दस्तावेज वेबसाइट से डाउनलोड करने पर, निविदा दस्तावेज की कीमत रू 5900/- रुपये की राशि (जी.एस.टी.सहित), डी.डी. के रूप में जमा की जाए, बैंक ड्राफ्ट रेलटेल कारपोरेशन आफ इंडिया लिमिटेड, कोलकाता के पक्ष में देय होगा।

अधिक जानकारी कि लिए Chapter 2 देखें.

निविदाकर्ता को निविदा सम्बंधित खर्च, जैसे निविदा तैयार करवाने ,जमा करवाने तथा निविदा में भाग लेने आदि जैसे सभी खर्च स्वयं वहन करने होंगे | रेलटेल इन खर्चों के लिए किसी भी दशा में देनदार नहीं होगा, भले ही निविदा का परिणाम कुछ भी हो |

महाप्रबंधक / संचालन



# **RailTel Corporation of India Limited**

EASTERN REGION, 3<sup>RD</sup> FLOOR, 33A, CHATTERJEE INTERNATIONAL CENTRE, J. L. NEHRU ROAD, KOLKATA – 700 071 PH. NO. 033- 4400-9999, 4404-1499, FAX: 033-44041490

E-Tender Notice No. RAILTEL/TENDER/OT/ER/HQ/2018-19/1067-73, dated 01.01.2019

RailTel Corporation of India Ltd. (RailTel) invites e-bids (Two packet system) for Deployment of maintenance team for maintenance of optic fibre cable network and upkeep of associated gears like AC, DG, Stabilizer, Change over unit, Shelter and Wi-Fi Equipments in Cuttack, Bhubaneswar, Rangiya, Guwahati, Lumding, Jorhat & Tikiri Sections of RCIL/ER.

The details of Tender are as under:

a)	i. Date/Time of publishing of e-Tender.	07.01.2019
	ii. Document downloading start date/Time	08.01.2019 from 11:00 Hrs.
	iii. Document downloading end date/time	06.02.2019 up to 17:00 Hrs.
	iv. Clarification start date/time	15.01.2019 from 11:00 Hrs. (Offline)
	v. Clarification end date/time	15.01.2019 up to 17:00 Hrs. (Offline)
	vi. Bid submission start date/time	08.01.2019 from 11:00 Hrs. (Online)
<b>b</b> )	Bid submission End date/time	07.02.2019 up to 15:00 Hrs. (Online)
c)	Opening of e-Bids.	07.02.2019 at 15:30 Hrs. (Online)
d)	Approx. value of Tenders	As per Annexure-A
e)	Earnest Money (EMD #	As per Annexure-A
f)	Cost of Tender Document#	Rs. 5900/- per tendered Section (Incl. GST)
<b>g</b> )	Validity of Offer	60 days from opening
	# These will be payable by Bank Draft in favour Kolkata.	of RailTel Corporation of India Limited,

<sup>\*</sup> If the tender document is downloaded from website then the cost of tender document as stated above have to be submitted along with the offer in the form of Demand Draft in favour of RailTel Corporation of India Ltd. payable at Kolkata from any nationalized / scheduled bank.

# Small scale Units registered with NSIC under single point registration scheme are exempted from cost of Tender Documents and from depositing Earnest money.

Note: Tender Notice and Tender Document are available on RailTel's website and can be downloaded from www.railtelindia.com or from the e-Tendering portal https://www.tcil-india-electronictender.com. For online bid submission the tenderer will have to necessarily download an official online copy of the tender documents from TCIL's e- portal 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.

The cost of Tender Document Rs. 5900/- (incl. GST) shall, however, have to be deposited in the form of demand Draft in favour of RailTel Corporation of India Ltd., Kolkata, payable at Kolkata.

For more details see Chapter-2.

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

**General Manager/Operation** 

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# SECTION-I Chapter-1

Annexure-A (अनुलग्नक-ए)

Tender No. RailTel/Tender/OT/ER/HQ/2018-19/1067-73, Date: 01.01.2019

# Section HQ, Section Details, Lenth of Section, Estimated cost for 03 (three) years & EMD amount details

RailTel Corporation of India Ltd., Eastern Region invites sealed open tenders from the established and reliable contractors with proven experience for the work of "Deployment of maintenance teams for maintenance of OFC cable network and upkeep of associated gears like AC, DG, Stabilizer, Change over unit, Shelter and Wi-Fi Equipments in Cuttack, Bhubaneswar, Rangiya, Guwahati, Lumding, Jorhat & Tikiri sections for a period of 3 years and extendable by one year on same terms and conditions' "for the different section enclosed. Evaluation shall be done sectionwise.

Details of sections which are being tendered are as below:

S. No.	Sectional HQ	Section Details	Length of Section (RKM)	Estimated Tender Value for 03 (three) years [OFC + Associated gears] (Rs.) (Excluding GST)	Earnest Money (@ 2% of total tender value) (Rs.) (rounded of to next Rs. 100/-)
ı. Ra	Cuttack	Cuttack – Paradeep, Barang – Dhenkenal-Talcher Road-Angul, Paradeep MW - Paradeep Exchange, Rajatgarh – Kapilas Road, Talcher Road- RailTel Talcher, RailTel Talcher - IGIT Talcher (U/G-HDD), RailTel Dhenkanal - DHQ Dhenkenal (U/G-HDD & O/H)	244.28	1,12,07,017/-	2,64,500/-
2	Bhubanes war	Jajpur – Balugaon, Khurda – Puri, Khurda - Khurda MW, Mancheswar - Mancheswar MW – Chandrasekharpur, RCIL Bhubaneswar - Bhubaneswar Idea (HDD link = 4.4 km, Rest U/G), BBS TM Office - Chandrasekharpur Exchange (O/H link), KUR RCIL POP – IIT ARGUL (U/G link)	258.63	1,12,30,813/-	2,65,100/-
3.	Rangiya	Nalbari- Agthori- Rangiya- Tejpur (Dekargaon)	218	1,09,84,575/-	2,59,300/-

				I	
		Dhupdhara - Guwahati –			
		Chaparmukh,			
		Guwahati-Agthori,			
		Guwanati-Aguion,			
		Azara RCIL - MRC (O/H),			
		RCIL Baihata- RTL Baihata,			
		Guwahati RCIL – TM Office			
		(O/H),			
		NMS GHY - NMS GHY via			
		Chandmari, VIP road, Reliance			
		six mile, Airtel Sixmile, NIC			
		Dispur, Dishnet G S Road,			
		Dishnet Panbazar. (HDD Fibre),			
		Azara Station - RMC (HDD			
		Fibre), Aghtori - IIT Guwahati			
		(HDD Fibre),			
		Guwahati - Maligaon (U/G			
		Fibre),			
		Last mile of AEI (0.630),			
		AMRTON (0.390), RELIANCE			
		(0.300), AIRTEL (0.200),			
		NIC(0.400), SBI (0.500),			
		DISHNET(0.300), IDEA (0.450),			
		Dishnet Panbazar (0.500). (U/G			
		Fibre) (Open Trench), Dishnet			
		2nd MCS - Regional Dental			
		College (O/H Fibre), Downtown	/		
		Hospital - NIC Chamber, G. S			
	G 1 .:	Road (W/P) (O/H Fibre), AEI	204.70	1.04.04.210/	2 45 600/
4	Guwahati	Chandmari - New GHY OFC Hut	284.79	1,04,04,318/-	2,45,600/-
		(O/H Fibre), RCIL NMS -			
		Panbazar (CCBT) W/P (O/H			
		Fibre), Azara Station - Decathelon Azara (O/H Fibre),	T .		
		Downtown University - Panikhati			
		OFC (W/p) ( O/H Fibre), RMC -			
		Airport (O/H Fibre), NIC Dispur			
		- CAG Beltala (O/H Fibre), NMS			
		GHY - Assam Textile Institute (	lane.		
		O/H Fibre), Azara OFC Room -			
		Krishnakata Handiqu (KKHOU) (			
		O/H Fibre), Dishnet G S Road -			
D - 1	ITAL	Bhavishynidhi Bhangagar ( O/H	N 125	India	Literal
V. C.	111 61	Fibre), Down Town Hospital -	1.00	ALIUIG	L. ( C2 /
		CWC Dispur (O/H Fibre),			
	1.4.30	Reliance Sixmile - NIRDPR,	I Ente	rorine)	
	100000	Khanapara (O/H Fibre), NMS			
		Panbazar - Kamrup Academi via			
		Cotton Collegiate (CSR Work) (			
		O/H Fibre), Maligaon OFC - SBI			
		Maligaon (O/H Fibre), Maligaon			
		OFC - GM Chamber via TPAAS			
		( O/H Fibre), Maligaon OFC - GM conference via TPAAS ( O/H			
		Fibre), Idea MSC - TM Office			
		(Palton Bazar) (O/H Fibre), TM			
		office - Paltonbazar chamber			
		(P/P) ( O/H Fibre), Narengi SBI -			
		Nerangi OFC Hut ( O/H Fibre)			
		· · · · · · · · · · · · · · · · · · ·			
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		Dimapur - Diphu - Lumding – Chaparmukh,			
		Chaparmukh – Amoni,			
		Dimapur AirTel - Reliance			
		(O/H), Dimapur RCIL - Nagaland			
		university (O/H),			
		Dimapur RCIL - S.tel (wkg) (O/H),			
		Dimapur RCIL - S.tel (Prot)			
5	Lumding	(O/H), Dimapur RCIL - Reliance (O/H),	238.32	1 10 57 425/	2.70.000/
3	Lumanig	Diphu RCIL - S.tel (O/H), Lumding RCIL - Idea (O/H)	230.32	1,18,57,435/-	2,79,900/-
		(wkg),			
		Lumding RCIL - Idea (O/H) (Prot),			
		Lumding AirTel - Reliance			
		(O/H), Lumding /Reliance - Voda (O/H),			
		Dimapur RCIL- IDEA pop			
		Dimapur, Hojai RCIL-Hojai Vodafone Pop,			
		Lanka RCIL-Lanka AirTel Pop, Hojai / RCIL - S.tel (O/H) (wkg)			
		Amguri - Mariani, Mariani -	7		
		Jorhat, Jorhat - Furkating,			
		Furkating – Dimapur,			
		Furkating - Golaghat – Numaligarh,			
		Simalguri – Amguri,			
		Simalguri – Sibsagar, Jorhat – Numaligarh			
		Jorhat RCIL - Jorhat OIL,	l.		
		RailTel Jorhat - Vodafone (O/H),	1		
		Jorhat Vodafone - Relaince (O/H),	_		
		Jorhat Vodafone - Tata Tele			
		(O/H), Jorhat Relaince - Canoro (O/H),			
Rai		Jorhat RCIL - Eng College (O/H)		India	Ltd.
6	Jorhat	(wkg), Jorhat RCIL - Eng College (O/H)	325.04	1,14,73,621/-	2,70,800/-
		(Prot), Jorhat RCIL - Agricultural		rprise)	
		University (O/H) (wkg),			
		Jorhat RCIL - Agricultural University (O/H) (Prot),			
		Jorhat RCIL - Idea (O/H) (wkg),			
		Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College			
		(O/H),			
		Jorhat RCIL - Rain Forest (O/H), Sarupathar RCIL - S.tel (O/H)			
		(wkg), Sarupathar RCIL - S.tel (O/H)			
		(Prot),			
		Amguri RCIL - Uninor (O/H) (wkg),			
		Amguri RCIL - Uninor (O/H)			
		(Prot),, Sibsagar RCIL - Reliance (O/H)			

		(wkg), Sibsagar RCIL - Reliance (O/H) (Prot), Sibsagar RCIL - Idea (O/H) (wkg), Sibsagar RCIL-Sivsagar Dist HQ, RCIL Golaghat-Golaghat Dist HQ, Sibsagar RCIL - Idea (O/H) (Prot) Rainforest Jorhat - Jorhat Institute of Sceince & Technology Reliance Jorhat - Jorhat Central Bank of India (W/P) Reliance Jorhat - Jorhat Central Bank of India (P/P) Oil Chamber - Jorhat Central Bank of India (W/P) RCIL Jorhat to SBI Jorhat (W/P) (O/H) RCIL Jorhat to SBI Jorhat (P/P) (O/H)			
7	Tikiri	Singapuram Road – Tikiri - Koraput	163	69,53,747/-	1,64,200/-

# Note:

- 1. City Access network will also be maintained by the maintenance team which will be up to around 15 % of total section length.
- 2. SOR- A: The detailed Scope of work is described on item no. 2.1 to 2.13.
- 3. Pre bid meeting will be held on 15.01.2019 at 15.00 hours.

Venue of the meeting will be at  $3^{\rm rd}$  Floor, Conference Room, RailTel Office, Eastern Region, Kolkata, 33A, Jawaharlal Nehru Road, Chatterjee International Centre, Kolkata  $-700\,071$ 

4. Detail of sections which are being tendered is as enclosed as above.

General Manager, Operations
For and on behalf of RailTel Corporation of India Limited

# **Chapter-2**

# **E-tendering Instructions to Bidders**

#### General

These Special Instructions (for e-Tendering) supplement 'Instruction to Bidders', as enclosed in Chapter-4 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 Now, the Government of India has made transparent secured manner. and e-tendering mandatory. Suppliers/ Vendors will be the biggest beneficiaries of this new electronic procurement. conducting For tendering. has decided to use the portal https://www.tcil-india-electronictender.com through TCIL, a Government of India Undertaking. This portal is based on the most 'secure' and 'user friendly' software from Electronic Tender®. A portal built using Electronic Tender's software is also referred to as Electronic Tender System® (ETS). Benefits to Suppliers are outlined on the Home-page of the portal.

# 1. <u>Tender Bidding Methodology:</u>

Sealed Bid System - 'Single Stage – Two packet system': In this, bidder has to submit it's Technical and Financial bid in separate sealed covers as per detailed procedure given in tender documents. The financial bids of those bidders will only be opened whose technical bid is found meeting the requisite eligibility criteria. The financial bid of bidder whose technical bid is found unacceptable will be returned unopened.

# 2. Broad outline of activities from Bidders Perspective:

- 1. Procure a Digital Signing Certificate (DSC)
- 2. Register on Electronic Tendering System<sup>®</sup> (ETS)
- 3. Create Users and assign roles on ETS
- 4. View Notice Inviting Tender (NIT) on ETS
- 5. Download Official Copy of Tender Documents from ETS (Important)
- 6. Clarification to Tender Documents on ETS
  - Query to RailTel (Optional)
  - View response to queries posted by RailTel, as addenda.
- 7. Bid-Submission on ETS
- 8. Attend Public Online Tender Opening Event (TOE) on ETS.
- 9. View/Post-TOE Clarification posted by RailTel on ETS (Optional), Respond to RailTel's Post-TOE queries

For participating in this tender online, the following instructions need to be read carefully. These instructions are supplemented with more detailed guidelines on the relevant screens of the ETS.

# 3. Digital Certificates

For integrity of data and its authenticity/ non-repudiation of electronic records, and be compliant with IT Act 2000, it is necessary for each user to have a Digital Certificate (DC).

also referred to as Digital Signature Certificate (DSC), of Class 2 or above, issued by a Certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA) [refer http://www.cca.gov.in].

#### 4. Registration

To make use of the ElectronicTender<sup>®</sup> portal (Error! Hyperlink reference not valid.), vendor needs to register on the portal (if not registered earlier). Registration of each organization is to be done by one of its senior persons who will be the main person coordinating for the e-tendering activities. In ETS terminology, this person will be referred to as the Super User (SU) of that organization. For further details, please visit the website/portal (https://www.tcil-india-electronictender.com), and click on the 'Supplier Organization' link under 'Registration' (on the Home Page), and follow further instructions as given on the site.

# Pay Annual Registration Fee as applicable.

Note: After successful submission of Registration details and Annual Registration Fee (as applicable), please contact TCIL/ ETS Helpdesk (as given below), to get your registration accepted/activated.

# **TCIL Helpdesk**

Contact Person Telephone/ Mobile-mail ID

Helpdesk Executives: 91-11-26241790 (Multiple lines), ets\_support@tcil-india.com

(Mobile Nos for Emergency only): 9868393775, 9868393717, 9868393792

# **RailTel Contact-1** (for general Information)

RailTel's Contact Person

Jogesh Prasad, Sr.Manager/Tender

Telephone/ Mobile: 9007044149

E-mail ID: jogesh@railtelindia.com

# **RailTel Contact-2 (for general Information)**

RailTel's Contact Person

Siddhartha Chattopadhyay, Sr.Manager/O&M

Telephone/ Mobile: 9007044158

E-mail ID: schattopadhyay@railtelindia.com

# 5. Bid related Information for this Tender (Sealed Bid)

The entire bid-submission would be online on ETS.

#### 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. Single Envelope (including Technical +Financial part)

  The electronic envelope consists of Main bid and Electronic Form (both mandatory)
  and Bid Annexure (Optional).
- 4. Online response to General Terms & Conditions (GTC) and Special Terms & Conditions (STC)
- 5. (Optional) Online Submission of modification, substitution bids for technical or financial parts, or withdrawal bid.

NOTE: Bidder must ensure that after following above, the status of bid submission must become "Complete" indicating successful submission of the online bid.

#### **6. Offline Submissions:**

The bidder is required to submit the following documents offline to RailTel Corporation of India Ltd, Chatterjee International Centre, 3<sup>rd</sup>. Floor, 33A, .J.N.Road, Kolkata-700071 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 & the words 'DO NOT OPEN BEFORE' (due date 07.02.2019 & time 15:30 hrs.).

- a) DD/ Bankers cheque in original against EMD-Bid Security in Original, in favour of Railtel Corporation of India, Payable at Kolkata. (With Tender No., Name of Firm & Mob. No. written on back side of DD)
- b) DD/ Bankers cheque in original against payment of tender Document cost in favour of Railtel Corporation of India, Payable at Kolkata. (with Tender No., Due date of Opening of Tender, Name and contact No. of Firm written on back side of DD)
- c) Power of attorney to be submitted in accordance, if applicable.
- **d)** In case bidder happens to be a NSIC bidder, the documentary evidence for same shall be submitted.
- e) SOR Sheet fillup and upload (duly signed & stamped)
- f) Pass Phrase in separate sealed envelopes for opening of Technical & Financial Bids
- g) Affidavit as per Annexure-B
- h) Offer Letter alongwith offer sheet

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

# 7. Submission of Eligibility Criteria related documents

Eligibility criteria related documents viz. TSEC certificate, NSIC certificate and other documents as applicable shall also be scanned and submitted ON LINE. Copy of these documents shall also be submitted in RailTel Office before Tender opening date. Bids without these off line submissions will be summarily rejected.

# 8. Special Note on Security of Bids

Security related functionality has been rigorously implemented in ETS in a multidimensional manner. Starting with 'Acceptance of Registration by the Service Provider', Provision for security has been made at various stages in Electronic Tender's software. Security related aspects as regard Bid Submission are outlined below:

As part of the Electronic Encrypter<sup>TM</sup> functionality, the contents of both the 'Electronic Forms' and the 'Main-Bid' are securely encrypted using a Pass-Phrase created by the Bidder himself. Unlike a 'password', aPass-Phrase can be a multiword sentence with spaces between words I love this World). A Pass-Phrase is easier to remember, and more difficult to break. It is recommended that a separate Pass-Phrase be created for each This method of bid-encryption does not have Bid-Part. the security and related vulnerabilities which inherent data-integrity are in e-tendering systems which use Public-Key of the specified officer of a Buyer organization for bid-encryption. Bid-encryption in ETS is such that the Bids cannot be decrypted before the Public Online Tender Opening Event (TOE), even if there is connivance between the concerned tender-opening officers of the Buyer organization and the personnel of e-tendering service provider.

Typically, 'Pass-Phrase 'of the Bid-Part to be opened during a particular Public Online Tender Opening Event (TOE) is furnished online by each bidder during the TOE itself, when demanded by the concerned Tender Opening Officers who will open the bid. Else Tender Opening Officer may authorize the bidder to open his bid himself. There is an additional protection with SSL Encryption during transit from the client-end computer of a Supplier organization to the e-tendering server/ portal.

# (Mandatory Additional Methods of pass phrase submission):

Additionally, the bidder shall make sure that the Pass-Phrase to decrypt the relevant Bid-Part is submitted to RailTel in a sealed envelope before the start date and time of the Tender Opening Event (TOE) along with other offline submissions.

# 9. Public Online Tender Opening Event (TOE)

ETS offers a unique facility for 'Public Online Tender Opening Event (TOE)'. Tender Opening Officers as well as authorized representatives of bidders can attend the Public Online Tender Opening Event (TOE) from the comfort of their offices. For this purpose, representatives of bidders (i.e. Supplier organizations) dully authorized are requested to carry a Laptop and Wireless Connectivity to Internet.

Every legal requirement for a transparent and secure 'Public Online Tender Opening Event (TOE)' has been implemented on ETS. As soon as a Bid is decrypted with the corresponding 'Pass-Phrase' as submitted online by the bidder himself (during the TOE itself), salient points of the Bids are simultaneously made available for downloading by all participating bidders.

ETS has a unique facility of 'Online Comparison Chart' which is dynamically updated as each online bid is opened. The format of the chart is based on inputs provided by the Buyer for each Tender. The information in Chart is based on the data submitted the Bidders by electronic forms. A detailed Technical and/ or Financial Comparison Chart Transparency. Detailed instructions given enhances are on relevant screens.

ETS has a unique facility of a detailed report titled 'Minutes of Online Tender Opening Event (TOE)' covering all important activities of 'Online Tender Opening Event (TOE). This is available to all participating bidders for 'Viewing/ Downloading'.

There are many more facilities and features on ETS. For a particular tender, the screens viewed by a Supplier will depend upon the options selected by the concerned Buyer.

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).

# 10. Other Instructions

For further instructions, the vendor should visit the home-page of the portal (https://www.tcil-india-electronictender.com), and go to the User-Guidance Center.

The help information provided through 'ETS User-Guidance Center' is available in three categories - Users intending to Register / First-Time Users, Logged-in users of Buyer organizations, and Logged-in users of Supplier organizations. Various links are provided under each of the three categories.

**Note**: It is strongly recommended that all authorized users of Supplier organizations should thoroughly peruse the information provided under the relevant links, and take appropriate action. This will prevent hiccups, and minimize teething problems during the use of ETS.

# 11. The following KEY INSTRUCTIONS for BIDDERS' must be assiduously Adhered to:

- 1. Obtain individual Digital Signing Certificate (DSC or DC) well in advance of your first tender submission deadline on ETS.
- 2. Register your organization on ETS well in advance of your first tender submission deadline on ETS.
- 3. While registering your organization on ETS Portal of TCIL, pl. make sure that the email id of Super user provided for registration and email-id on which Digital Signature Certificate of the Super user is issued are exactly the same.
- 4. Get your organization's concerned executives trained on ETS well in advance of your first tender submission deadline on ETS.
- 5. Bidder should ensure that **official copy of tender document** has been downloaded by clicking the radio button for confirmation else e-Procurement system will not permit the bidder to participate in the tendering process.
- 6. Submit your bids well in advance of tender submission deadline on ETS as there could be last minute problems due to internet timeout, breakdown, etc.

# 12. Minimum Requirements at Bidders end

- Computer System with good configuration (Minimum i3, 2 GB RAM, Windows 7 or above)
- Broadband connectivity.
- Microsoft Internet Explorer 10 or above
- Digital Certificate (s) for users.

# 13. Vendors Training Program

One day training (10:00 to 17:00) on how to use the ETS Portal for e-Tendering would be provided. Training is optional. However, if a vendor has not already attended ETS Vendor Training earlier, it is highly recommended that the vendor attends this training positively to be able to submit the e-Tender smoothly without any problem.

Vendors are requested to carry a Laptop and Wireless Connectivity to Internet while attending the ETS Vendor Training.

#### **Tentative Dates**

Date of uploading of Tender document + 7 days

#### Venue:

RailTel Corporation of India Limited,

Plot No. 143, Sector-44,

Opp. Gold Souk Mall,

Gurgaon -122003.

Vendors Training Charges: Rs. 5,000/- (Per Participant) per training day (plus GST as applicable).

Mode of Payment of Fees: DD drawn in favour of M/s TCIL, New Delhi & payable at New Delhi.

# **Chapter-3**

# **Check List for Tenderer before submission of Tender:**

- 1. Read carefully and understand each clause of the Tender Document. Your Special attention is requested on various penalty clauses mentioned in tender documents. Each page of the Tender Document is to be signed and stamped.
- 2. Submit documents to prove your minimum Eligibility criteria in two separate envelopes (1<sup>st</sup> for Technical & 2<sup>nd</sup> for financial bid).
- 3. Deposit EMD (only as DD) as listed in Tender Document.
- 4. Submit documents like Invoices, Cash Memo, Bills etc. in support of possession of vital test equipments/machines. Undertaking to provide vital equipment on awarding the contract.
- 5. Submit list of Personnel who will be deployed on regular basis for this Maintenance work along with their qualification and experience.
- 6. Submit complete plan of deploying your maintenance teams indicating their head quarters to achieve the end objective of this Maintenance Tender. Head quarter of maintenance team for each section shall be decided by the RailTel.
- 7. Please quote a percentage (both in figure & words) 'above/below' the rates given by RailTel against 'SOR-A -.
  - If needed, separate Work Order will be issued by RailTel for execution of some of the items against 'SOR-B' as per rates indicated by RailTel .Confirm your acceptance of the same by signing on SOR-A, SOR-'B', the tenderer shall quote percentage (Above/below) for SOR-A. For execution of items against SOR-B, no minimum work can be indicated, however, the maximum amount against SOR-B shall normally be kept at 10% of SOR-A per annum. However, additional 20% of SOR-A under SoR-B may be utilized for OFC diversion works, marketing requirement and improvement works etc.
- 8. Failure to comply with the above points shall render the offer to be invalid and liable to be rejected.

**Signature of Tenderer with Seal** 

# Chapter-4 PREAMBLE

S. No.	Name of the work
1	Deployment of maintenance teams for maintenance of OFC cable network and associated equipment etc. for a period of 3 years. (SOR-A)
2	OFC improvement works and other minor/Diversion works (SOR-B)
3	Up-keep of infrastructure like AC machine, DG sets, shelter, power plant and associated control equipment etc.
4	Up keep of Wi-Fi related assets like Fiber, Switches, UPS, Battery, AP, LAN & Power Cables etc. An exclusive diploma engineer shall be Deployed for the purposes. (SOR-A)

The contract shall be extendable by one year on same terms & conditions.

#### 2. SUBMISSION OF TENDER BID:

#### 2.1 The tender bid shall be submitted as below:

The bids shall be submitted online on TCIL's E-tendering portal which should describe the Tender No., its description, <u>section name</u> and date of opening. The complete Offline Documents shall be addressed to:

General Manager/Operations, Eastern Region RailTel Corporation of India Limited, Chatterjee International Centre, 33A, Jawaharlal Nehru Road, 3<sup>rd</sup> floor, Kolkata – 700 071

**Last Date of submission of tenders:** The tenders for the Tender No. RailTel/Tender/OT/ER/HQ/2018-19/1067-73, dated 01.01.2019, will be received in online system at TCIL's E-Tendering Portal, upto **15:00** hrs IST of Date **07.02.2019** and will be opened at **15:30** hrs on same day. If the above said day happens to be a holiday, the tender shall be opened on the next working day at the given time.

# 2.2 Restriction regarding Bidding:

A bidder can bid only one out of the following section:

- a. Only one section out of Bhubaneswar & Cuttack
- b. Only one section out of Rangiya & Guwahati
- c. Only one section out of Lumding & Jorhat

In case a bidder has participated in both the section as above, his bid is liable to be cancelled for both the sections.

#### 3. ELIGIBILITY CRITERIA:

The bidder/tenderer should have the following Technical & Financial capabilities for each section that the tenderer is quoting:

# 3.1 Technical Capability:

#### Tenderers should have:

(a) Performed OFC route maintenance for a continuous stretch of more than 150 Kms (One hundred fifty kilometres) for a minimum period of 6 (six) months in the past three financial years & current year before the date of opening of tender.

 $\Omega$ r

(b) Should have executed trenching, laying, splicing and termination of OFC for a continuous stretch of 50 Kms (Fifty Kilometre) in a single contract or a combined length of minimum 200 Km (Two Hundred Kilometres) in the past three financial years & current year before the date of opening of tender.

#### Note:

- 1) Tenderers must have completed the above mentioned works either for Govt. / public Sector or for reputed private sector telecom service providers/Infrastructure Provider with satisfactory performance report from the client.
- 2) Tenderer must have completed the above mentioned works in the last three financial years & current year reckoned from the date of opening of the tender.
- 3) No consortium/ Joint Bid shall be allowed.
- 4) Certified copies of the necessary experience certificates to this effect shall be enclosed along with the tender document while quoting for establishing credentials.

#### **3.2** Financial Capability:

- a) The tenderer must have received total contract value of 150 % of the advertised value of tendered sections for which they are participating in the past three financial years & current year before the date of opening of tender.
- b) The tenderer should produce:
  - (i) Solvency certificate from a Nationalized/ Scheduled Bank for a minimum value of 40% of the annual value of the tendered sections. If the quoted cost is < 1 Cr, this condition will not apply.
  - (ii) Audited balance sheet and income statement of all the preceding three Financial years and PAN Number.
  - (iii) The contractor should submit copy of GST registration certificate for the states wherever applicable.

**3.3** In case the tenderer wants to quote for multiple sections, the financial and technical criterion given above will have to be separately meet for each section being quoted i.e. for 4 sections tenederer should have 4 times capability required for one section.

# 3.4 System of Verification of Tenderer's Credentials:

- 3.4.1 The Tenderer shall submit along with the tender document, documents in support of his/ their claim to fulfil the eligibility criteria as mentioned in the tender document. Each page of the copy of documents/ certificates in support of credentials, submitted by the tenderer, shal be self attested/ digitally signed by the Tenderer or authorized representative of the Tendering firm. Self attestation shall include signature, stamp and date (on each page). Only those documents which are declared explicity by the Tenderer as "Documents supporting the claim of qualifying the laid down eligibility criteria", will be considered for evaluating his/ their tender.
- 3.4.2 The Tenderer shall submit a notarized affidavit on a non-judicial stamp paper stating that they are not liable to the disqualified and all their statements/ documents submitted alongwith bid are true and factual. Standard format of the affidavit to be submitted by the bidder is enclosed as Annexure-B. Non-submission of an affidavit by the bidder shall result in summary rejection of his/ their bid. And it shall be mendatory incumbent upon the Tenderer to identify, state and submit the supporting documents duly self attested by which they/ he is qualifying the the qualifying criteria mentioned in the Tender Document. It will not be obligetary on the part of the RailTel to scrutinize beyond the submitted document of the Tenderer as far as his qualification for the tender is concerned.
- 3.4.3 The RailTel reserve the right to verify all the statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the Railtel, make available all such information, evidence and documents as may be necessary for such verification. Any such verification or lack of such verification, by the RailTel shall not relieve the bidder of its obligations or liabilities here under nor will it affect any right of the Railtel thereunder.
- 3.4.4 In case of any wrong information submitted by the tenderer, the contract shall be terminated, Earnest Money Deport (EMD), Performance Guarantee (PG), and Security Deposit (SD) of contract forfeited and agency barred for doing business on entire RailTel for 5 (five) years.

Annexure-B (अनुलग्नक-बी)

# FORMAT FOR AFFIDAVIT TO BE UPLOADED BY TENDERER ALONGWITH THE TENDER DOCUMENTS

(To b	e executed in presence of Public notary on non-judicial stamp paper of the value of Rs. 100/ The paper has to be in the name of tenderer)**
the	purpose of the Tender documents for the work of the tender.  as per the tender.
No Regio	of (RailTel Corporation of India Limited/Eastern), do hereby solemnly affirm state on the behalf of the tenderer including its tuents as under:
1.	I/We the tenderer (s) am/are signing this document after carefully reading the nts.
2. all the	I/we the tendered (s) also accept all the conditions of the tender and have signed pages in confirmation thereof.
docun conter evalua	I/we hereby declare that i/we have downloaded the tender document from //www.tcil-india-electronictender.com portal. I/we have verified the content of the nent from the website and there is no addition no deletion or no alternation to be not of the tender documents. In case of any discrepancy noticed at any stage i.e. ation of Tenders, execution of work or final payment of the contract, the master available with the RailTel administration shall be final and binding upon me/us.
-	I/we declare and clarify that I/we have not made any misleading or false entation in the forms, statements and attachments in proof of the qualification ements.
	I/we also understand that my/our offer will be evaluated based on the nents/credentials submitted along with the offer and same shall be binding me/us.
	I/we declare that information and documents submitted along with the r by me/us are correct and I/we are fully responsible for the correctness of the nation and documents, submitted by us.
of ten	I/we undersigned that if the certificates regarding eligibility criteria submitted by found to be forged/false or incorrect at any time during the process for evaluation ders, it shall lead to forfeiture of the tender EMD besides banning of business for evaluation years on entire RailTel. Further, i/we (Insert name of the tenderer) **
my/ou	ir constituents understand that my/our offer shall be summarily rejected.

8. I/we also understand that if the certificates submitted by us are found to be false/forged or incorrect at any time after the award of the contract, It will lead to termination of the contract, alongwith forfeiture of EMD/SD and performance guaranty besides any other action provided in the contract including banning of business for five years on entire RailTel.

DEPONENT SEAL AND SIGNATURE OF THE TENDERER

# **VERIFICATION**

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

**DEPONENT** 

SEAL AND SIGNATURE OF THE TENDERER

Place:

Dated:

\*\* The details as appropriate, are to be filled in suitably by tenderer. Attestation before Magistrate/Notary Public.

RailTel Corporation of India Ltd.

#### 4. General Condition:

The tenderer must have a proper office with Landline phone/FAX, Internet connection Computer, printer & Office staff etc. and provide Phone, Fax no. & Email ID in his credentials along with the submission of offer. Any change subsequently shall be advised in writing to this office.

# **5.** Validity of the Contract:

The validity of the contract shall be three Years from the date of taking up service contract after issue of LOA and shall be extendable by one year on same terms & conditions.

In case of premature withdrawal (before the completion of the tenure agreed) of the Team by the contractor for any reason whatsoever, the Security Deposit shall be forfeited. Also, in case the premature withdrawal is without at least one month's notice, additionally the maintenance charges for the last two months shall also be forfeited.

6. Tender Cost: Cost of the tender document is Rs. 5,900/- (Rupees five thousand nine hundred only) including GST. The payment for the cost of the tender document shall be made as Demand Draft on any Scheduled Bank/Nationalized bank of RBI in favour of RailTel Corporation of India Ltd., payable at Delhi/Mumbai/Kolkata/Secunderabad as the case may be. Cost of the tender document is not refundable.

Small Scale Units registered with NSIC under single point registration scheme shall be exempted from the cost of tender document.

- 7. The tenderer shall produce along with tender document, the documentary support for their experience. The tenderer shall also state the number of fully equipped teams, which shall be placed fully under the disposal of RailTel. Documentary support like cash memo/invoice/bill for the possession of vital equipment such as OTDR, Splicing Machine, Power meter, Cable route locator, Road Vehicle etc. shall be submitted along with the tender document.
- 8. All tenders must be accompanied by the Schedule of Rates attached as SOR-A, SOR-B duly filled in and signed complete with technical details, unsealed tenders will not be accepted.
- 9. EMD: A sum of Rs. 2% of total tender value for respective tendered section should be deposited as earnest money in favour of RailTel Corporation of India Ltd., payable at KOLKATA, in the form of Demand Draft on any Scheduled Bank/Nationalized bank of RBI. The validity of Demand draft will be at least 60 days beyond opening of tender. No interest is allowed on this Deposit and RailTel Corporation reserves the right to forfeit this Deposit if the successful tenderer fails to submit the Security Deposit required by the terms and conditions of the tender. Tenders not accompanied by Earnest Money will be summarily rejected.

For multiple sections, the EMD amount will be 2% of the total tender value for the total number of sections which he has quoted.

- **9.1** For NSIC registered firm: Please refer clause no. 5.8 (Earnest Money) under instructions to tenderers and conditions of tendering.
- **10.** The offer of Tenderers, who do not comply with the above conditions, will be rejected.
- 11. The RailTel reserves the right to accept / reject any tender in respect of whole or any portion of the items specified without assigning any reason whatsoever. RailTel also reserves the right to add or delete any maintenance section. In case of Addition/deletion of any section, the change in contract value will be governed as under:

# **Change in Sectional length:**

+/- 0% to 55% - +/- ½ of % age of change in sectional length rounded off to nearest full % age.

- 12. Material to be supplied by RailTel & Contractor: The quoted rates in the schedule should include all the materials to be provided for the work to be done by the contractor as described in the tender document and the schedules attached. Tenderer's special attention is invited to the fact that no material shall be arranged /supplied by RailTel except OFC & HDPE Duct (as required) in various sections for Preventive Maintenance and fault rectification of OFC. All materials including the materials covered under the Schedule of Requirement and those required to achieve the end objective and any special protection materials needed are to be supplied by the contractor. The material used by contractor should be of approved quality specified.
- 13. Unit Prices: The prices quoted by the tenderers shall be as excluding GST price against SOR-A after taking all the relevant factors into consideration and these should be firm without any variation clauses. The rate of GST should also be mentioned as applicable. All other taxes excluding GST as payable under the law of the land will be born by the bidders, while for SOR-B rates have been indicated by RailTel are also excluding GST. RailTel shall not accept any liability for the same after award and acceptance of contract. However, the tenderer shall quote only percentage (at par/Above/below) for SOR-A rates.
- 14. The teams shall be deployed within 21 days from the date of issue of Letter of Acceptance. If the tenderer fails to deploy the machineries and man power as per tender document, LOA shall be cancelled and EMD shall be forfeited.
- 15. Validity: The tenderer shall keep the offer open for a minimum period of 60 days from the date of opening of the tender within which period the tenderer cannot withdraw his offer. Any contravention of this condition will make tenderer liable for rejection and forfeiture of his Earnest Money deposit.

- **16.** Before quoting, the Tenderers are advised to ascertain the nature of work involved and invariably undertake a site inspection.
- **17.** Tenderer is required to quote for the complete work.
- 18. The submission of tender will be deemed to imply that this memorandum and all documents enclosed have been studied and understood and the tenderer is aware of the full scope of the work to be done and the conditions affecting the execution.
- 19. The tenderer shall not increase the quoted rates in case RailTel decides to negotiate for reduction in rates. Such negotiations shall not amount to cancellation or withdrawal of the original offer and the rates originally quoted will be binding on the tenderer.
- 20. If the tenderer deliberately gives wrong information in his/her tender or creates such circumstances for the acceptance of his/her tender, then RailTel reserves the right to reject such tender at any stage. In case credential certificate(s) submitted by the contractor are found to be incorrect, the EMD deposited shall be forfeited in respective tenders he has quoted and he will be barred from quoting in RailTel tenders for a period of 3 years.
- 21. Performance Bank Guarantee (PBG): The successful tenderer shall give a performance guarantee amounting to 5 % of gross annual contract value (Basic amount plus GST) within 21 days from the date of issue of LOA. Extension of time for submission of PBG beyond 21 days and upto 60 days from the date of issue of LOA may be granted subject to the conditions that a penal interest of 15 % per annum of the amount of BG shall be charged for the period of delay beyond 21 days i.e. 22<sup>nd</sup> day after date of issue of LOA. In case the successful tenderer is not able to submit PBG, the tenderer will have options to submit this amount in the form of Demand draft. PBG (DD in lieu) shall be released after satisfactorily completion of the work and on expiry of warranty. The Bank Guarantee should be issued & confirmed through SFMS (Structured Financial Messaging System).
- 22. The Security Deposit for each work shall be 5% of total contract value (Basic amount plus GST). The Earnest Money (2% of total contract value) of the successful tenderer shall be adjusted towards the same.

Remaining 3% of total contract value shall be recovered from the contractor's "on account" bills as under:

- (a) The rate of recovery should be at the rate of 10% of the bill amount till 5 % total contract value is achieved. (EMD 2% and balance 3% from the running bills)
- (b) Security Deposit shall be returned to the contractor after the complete physical completion of the work as certified by the competent authority.

- (c) No interest will be payable upon the Earnest Money and Security Deposit.
- (d) Wherever the contract is rescinded, security deposit and PBG shall be forfeited.
- 23. The successful tenderer shall sign an agreement for the execution of the work as tendered by him/her and accepted by RailTel within 15 days after the receipt of notice from RailTel that such documents are ready.
- 24. The maximum number of sections that can be awarded to a contractor is 50% of the number of tendered sections, in case of odd number of tendered sections, number of sections to be awarded should be rounded off to higher side.



RailTel Corporation of India Ltd.

(A Meurana Calegory | Linterprise)

# **Chapter-5**

# INTRODUCTION

# **INFRASTRUCTURE:**

- 1. RailTel has exclusive Right of Way along the Railway track. RailTel has built over 40,000 Kms length of OFC route along the ROW and access network in cities on which different transmission equipment, data network equipment etc have been deployed.
- 1.1 Armored OF Cable has been laid along the route is provided with HDPE/GI/RCC protection wherever required for Track Crossing, Road Crossing, LC gates etc. The contractor shall accept the site on as—is—where—is basis. The maintenance agency is not only responsible for the proper maintenance of backbone UG/Over Head OFC laid between node to node but also the access OFC network laid in cities (upto around 15% of total section length). The agency is fully responsible for the end to end performance between the two nodes in the entire jurisdiction of the teams reach awarded.
- 1.2 The RailTel has DWDM, STM telecom equipments, Power plant, DG sets, AC machine, earthing etc in POPs on OFC network.
- 1.3 RailTel has Wi-Fi related assets like Fiber, Switches, UPS, Battery, APs, LAN, Power Cables etcat some Railway stations in the section.

#### 2. SCOPE OF WORK:

- 2.1 The CONTRACTOR shall be responsible for the maintenance of the OFC network awarded to him. This shall include but not limited to undertake all required preventive measures of the OFC route, rectification of faults and restoration jobs required for achieving the OFC link availability of highest order.
- 2.2 The contractor shall carry out any OFC related works like attending to existing protection works, splicing, termination, tightening of nuts/bolts, provision of complete clamps for supporting the already done protection work over culverts/bridges, wiring of equipment as directed by the Engineer of the section. No additional payment will be made on account of these technical works.
- 2.3 The contractor shall also carry out other miscellaneous works such as proper up keep of Telecom equipment, power plant, DG sets, Air Conditioners, minor repairing of shelters/building, Wi-Fi equipments, Earthing arrangements general cleanliness of the RailTel's POP, and other such activity as advised by Engineer of the section on periodical basis. In case of replacement or repair of any spares or parts of any equipment, payment for the same will be reimbursed to contractor on actual basis.

2.4 The maintenance contract is planned to be awarded for a period of 3 years and extendable by one year on same terms & conditions. However, the contract can be terminated by giving 30 days notice before the expiry of contractual completion period in case performance of the contractor is not found satisfactory or as and when required by RailTel.

# 2.5 **Preventive Maintenance for Cable Protection:**

- 2.5.1 Regular patrolling and surveillance of OFC route to have pro-active check to prevent OFC link disruptions. It will be done by dedicated and exclusive team who will not be assigned any other work. There should be at least one patrolman on approximately every 50-60 kms beat and between two Long Haul PoPs (also located at approximate length of 50-60 Km). Each patrolman has to be equipped with a mobile phone. Suitability of patrol man shall be examined by Engineer before deployment.
- 2.5.2 Patrolling of the entire section has to be done by way of 'Window Inspection' from passenger train and the entire section has to be covered at least thrice a week during daytime. If any activity is observed which may affect the OFC, the patrolling team should get down and reach the suspected spot by foot or by any means and prevent any damage to the OFC. The matter must be reported to the RailTel officials immediately. The time-to-time movement of the patrolling team shall be kept informed on daily basis so that they can be contacted during emergencies.
- 2.5.3 Part of the team shall also go on foot/bi-cycle along the entire route so that minimum two block sections on every day is covered and observe the condition of the OFC. It is expected that the entire section under the contract will be covered by foot patrolling at least 3 times every month. Therefore, for effective patrolling of the entire section by passenger train as well as by foot/bi-cycle, as above, sufficient number of persons are to be engaged by the contractor. Monitoring of jobs undertaken by other agencies in the vicinity of RailTel's fiber network to ensure the safety of RailTel's OFC cable shall also be done by assigned agents of the contractor.
- 2.5.4 Attending to / safe-guarding against any signs of damage or potential damage of RailTel's OFC network, which come to light during patrolling.
- 2.5.5 Collecting information & accordingly coordinate with other agencies before the execution of work, who shall carry out any work in the vicinity of RailTel's OFC route, to safe-guard against the damages to RailTel's OFC cable. The contractor shall effectively co-ordinate with other agencies working along the RailTel's OFC route to prevent damage to OFC link and the contractor will be held responsible for any cut of the link by other agencies.
- 2.5.6 Liaisoning also shall be maintained with other department like NHAI, Municipal corporations, Nagar palikas, Rlys, Urban Development Authorities etc regarding the permission being given or shall be given to other parties for any type of

construction works along the RailTel OFC route. Regular liasioning with various Railway authorities like Railway field officials of Engineering, S & T and Electrical department and protect the OFC when any of these departments do work, which may directly or indirectly affect the OFC in the section. However, only cost of the material (JC and JE), may be reimbursed at SoR-B rates by RailTel for rectification of cuts during large scale Railway/NHAI works in all the O&M contracts with the approval of ED/Region. Penalty for not providing JC then shall be Rs. 9,080/- per JC (Excl. GST). For all other cases it shall be equal to the penalty proposed in Annexure "E".

2.5.7 Additional patrolmen, if required for gauge conversion/ doubling works / continuous construction works shall be deputed by the contractor including day-to-day open line works of railway such as track works, bridge works and sleeper works etc.

# 2.6 Planned repairs to existing joints/Terminations:

The preventive maintenance should be carried out with prior approval and during planned shutdown period generally during night time between 00:00 to 05:00 hrs. The additional shutdown is not guaranteed, as number of customer circuits will be in operation.

2.6.1 Contractor shall also carry out testing of existing joints and OFC repairs along with testing of OFC route for improvement in the performance with link margin as per national/international standards and instruction of Engineer with consumable material such as repair kit etc. No extra charges will be payable for this schedule maintenance except maintenance charges as per SOR-A. However, for attending OFC joint / termination and laying of cable etc as the case may be for improvement of fibres which was identified as high loss / break / defective (at the time of taken over of the section) payment will be made as per SOR – B rates.

#### 2.6.2 Preventive maintenance of OFC cable:

All measurements for preventive maintenance shall be carried out as per prior agreed time schedule. The testing of all fibers including short haul fibers shall be done, once in every four months for all sections and reports shall be submitted along with alternate bi-monthly bill. Any defects observed in the OF cable or in any of the associated equipments shall be attended at site. RailTel's maintenance supervisor will also accompany the teams as and when required. Testing should be supervised by the Engineer. Working fibers will be tested as per the instructions of engineer. OTDR testing report in proforma 1 & 2 will be submitted within 10 days of doing the measurements.

- 2.6.3 Testing consists of OTDR testing and Power Meter reading of all fibers for proving one to one correspondence. Station to station testing is required for spare fibers terminated at block stations in both the directions. Run through fibers may be tested from end to end only. The periodicity of testing is once in four months for all block sections.
- 2.6.4 **Reports:** Reports consists of (a) Section-wise tabulation of all fiber events reported by OTDR of more than 0.2 dB over the section fiber wise for all fibers tested in the given Performa in print and in Excel worksheet, (b) Tabulation of

power loss from A-B & B-A direction, average and loss per km at 1550 for all the fibers tested. The OTDR traces should be submitted in soft copy format.

- 2.6.5 In a situation, where in the vicinity of RailTel's OFC network any major construction / doubling projects are going on or are to start and necessitates rerouting through a new safe route of OFC to avoid damage, Contractor shall explore feasibility of alternate routes & provide detailed route plan for new location, where re-routing can be done.
- 2.6.6 Block section-wise condition of fibers is to be plotted using following color codes. Soft copy of the report to be submitted in hard & soft copy along with Bimonthly bill.
  - a. Broken and non-usable high loss fibers------RED
    b. High loss fibers but usable in case of emergency------PINK
    c. Working fibers-------GREEN
    d. Spare usable fibers-----------------YELLOW

Summary of fiber condition should be provided in the performa attached.

# 2.7 Equipment/other fault restoration Services:

- 2.7.1 The contractor shall facilitate Engineer rectification of any other type of fault (equipment/ power plant etc) & shall be available with maintenance team & transport etc for going to the section.
- 2.7.2 Head Quarter of Maintenance Teams to be stationed at the designated Head quarters given in Annexure-A or at any other place mutually agreed to. The Maintenance teams shall comprise of manpower, logistics, required Tools/Plants/Machinery, equipments and sufficient fund to meet day to day expenditures, etc
- 2.7.3 On all working days the members of team with team equipments should be present in office of the Engineer during office period unless team is assigned work in the section. The movement of team members should be in the knowledge of Engineer responsible for O&M of the section. The attendance of all team members shall be marked in the Performa accordingly. Daily diary of the works and movement of all staff shall be submitted along with the bill duly verified by the Engineer responsible for O&M of the section.
- 2.7.4 **Scope of maintenance:** Identification of OFC fault/cut on ground, obtaining permission from local authorities if required, excavation of earth to expose cable, laying of required length of OFC with protection wherever required, splicing of OFC, installation of Jointing pit (FRP/RCC chamber) & back filling of pit (FRP/RCC chamber) with Sand, minor repairing of shelters/building like leakage etc, provision/alignment/tightening of clamps

and maintenance of GI pipes and troughs on bridges, supply and installation of cable Route Markers of RCC/FRP make and Joint Markers as per specification, testing of OFC and updating of OFC as-built drawings etc. Cable route plan will be up-dated with each instance of cut, including date, cable location etc. Up-dated copies of relevant sheets of ABD (As built drawing) will be submitted along with bi-monthly bill. Updated drawing of whole section will be submitted in soft copy every 6 months & hard copy every year.

# 2.8 Restoration for OFC cuts:

Under OFC link cut condition, the following activities shall have to be taken up by the CONTRACTOR for the restoration of OFC cut fault for the end-to-end restoration of the network traffic/service:

- 2.8.1 On receipt of information of fault in OFC the team stationed at the team HQ shall move immediately for locating and rectifying fault as per the response time given below. The working fibers shall be restored first. Sufficient labour shall be engaged for speedy restoration. Adequate care shall be taken not to damage QUAD copper cable of Railways if laid in the same trench.
- 2.8.2 For the identification of exact fault location on immediate basis, the OTDR measurement of spare fibre shall be made from the nearest telecom station/Node. For better clarity, the OTDR measurement on spare fiber shall be taken at Nodes / nearest OFC joints situated at both ends of cut and using dummy fiber spool of 1km, in case required.
- After the OTDR measurement, the as-built drawing shall be referred and the 2.8.3 physical site of fault on ground shall be located. It may be possible that data in asbuilt document may not be correct for the accuracy purpose, as such As-built drawing shall be taken as reference only. No claim of contractor will be entertained on account of the inaccuracy of the as built drawing. Accordingly, locating the OFC fault, the job of excavation in all types of soil, identification of OFC, pulling of cable from both ends if feasible, construction of jointing pits, splicing of OFC, back filling of trench & jointing-pit shall be taken up as per the standard procedure. Further, FRP /RCC marker at the jointing pit has to be provided for identification of route as well as jointing pit, depth of cable etc (Date of installing Jointing pits to be updated on route plan). This should be incorporated in the cable route plan also with accurate offset and depth recorded. The splicing of fibers are to be carried out in line with the installed fiber i.e. G.652 and measurements are to be taken on spare fibers. In case the active fibers are to be used, precautions are to be taken with regard to the power launched on to the fiber. Restoration of site shall be done to the entire satisfaction of the Engineer.
- 2.8.4 In case of OFC cut where it is not possible to pull the cable from either end, the contractor has to make two pits/ splicing joints required length of OFC supplied by RailTel has to be put in between two joints. The spacing of joints/ pits shall be

depending up on situation at site and shall be as decided by Engineer. Remaining OFC has to be coiled in both the pits. Further, joint FRP/RCC markers at each jointing pit have to be provided for identification of route as well as jointing pit. The precise joint locations so provided should be incorporated in the cable route plan also.

- 2.8.5 After the completion of site activities, the CONTRACTOR shall ensure the restoration of the traffic from the Network Operations Center (NOC) and there after fresh OTDR measurement & traces (at 1550 nm) shall be taken for all spare fibers & submitted to RailTel.
- 2.8.6 After the completion of site activities & hop test, the As-built drawing shall be updated by incorporating the new details like OFC loop used, Joint-pit location, offset and depth of cable etc. Position of OFC should be shown from the center of the nearest track in as built drawing and the length of loop in joint pit after fault restoration shall be incorporated in as built drawings. The updated final as built drawings of cable route plans in soft and hard copies shall be made available to Railtel after end of contract period.
- 2.8.7 After attending the fault & permanent restoration a Fault-Rectification report, jointly signed by RailTel & CONTRACTOR, shall be generated for the closure of the complaint.
- 2.8.8 Any other job required for the restoration of the OFC fault/cut in totality is to be taken up by the Contractor.
- 2.8.9 In case the site condition is not favorable for the immediate permanent restoration of the fault, the temporary restoration of the service fibers shall be taken up immediately with the approval of Engineer. Permanent restoration work will not be considered in breakdown time unless there is again link break during restoration job. Permanent restoration of joint is to be carried out by contractor within 48 hrs from time of fault /OFC cut. In case the site is not conducive for permanent restoration some arrangement of manpower has to be done by contractor for safeguarding exposed OFC till permanent restoration. No extra payment shall be given to contractor on account of deployment of additional manpower to attend the cut. In case of further cuts at exposed OFC location contractor will be accountable for this additional downtime of OFC link.
- 2.8.10 OFC issued by RailTel to the contractor for use at OFC fault locations should be checked & tested before use at site.
- 2.8.11 It is mandatory for the contractors to install the jointing chambers and joint markers of RCC/FRP type after permanent restoration is done and should therefore keep adequate spare stock. The contractor shall keep minimum two nos. of jointing pit during the failure/cuts.

- 2.8.12 In case of any breakdown in the access network/last mile connectivity, Contractor shall be responsible for obtaining approval at his own cost from statutory authorities like Municipal Corporation, Development Authorities, Electricity Department PWD, NHAI and any other concerned authority as required for carrying out the repair.
- 2.8.13 Drains, pipes, cables, overhead wires and similar services encountered in the course of the works shall be guarded by the contractor at his own cost, so that they may continue in full and uninterrupted use to the satisfaction of the owners thereof.
- 2.8.14 Should any damage be done by the CONTRACTOR to any AC Power mains, utility pipelines cables or lines (whether above or below ground etc) whether or not shown on the drawings, the CONTRACTOR must make good or bear the cost of making good the same without delay to the satisfaction of the Engineer.
- 2.8.15 CONTRACTOR shall observe in addition to Codes specified in respective specification all national and local laws, ordinances, rules and regulations and requirements pertaining to the WORK and shall be responsible for extra costs arising from violations of the same.
- 2.8.16 CONTRACTOR shall have at all times during the performance of the WORK, a competent supervisor on the site. Any instruction given to such Supervisor shall be considered as having been given to the CONTRACTOR.
- 2.8.17 The CONTRACTOR shall employ as many personnel as required to comply with the local rules and administrative orders governing the Working Hours of Employment the contractor shall be responsible for compliance with all statutory requirements including personnel related matters.
- 2.8.18 Night Work: The contractor shall also work during night time and is required to complete the work in all respects within the stipulated time. Sufficient lighting arrangements and precautionary steps shall be provided to safeguard the workmen, public and the Railway assets and to afford adequate facilities for properly placing and inspecting the material and the work when the night work is in progress.
- 2.8.19 The minimum down time shall include time taken in restoration of fault/cut caused by any means like miscreant activity at day or night, due to work done by Railway or any other organization, due to development of high losses / break at existing joints, fault caused due to rodent, ant etc.
- 2.8.20 In case of partial damage of the cable or development of high loss in the working and spare fibre or cable cut at any time (day/night) by miscreants or by any agency, the responsibility of repairing the defective fibre lies with the contractor and included in the Schedule of Rate (SOR) A.

- 2.8.21 In case contractor fails to complete the restoration of link (as per original condition) or submit OTDR & test records to establish completion of work a penalty as given in the tender document shall be recovered in addition to the recovery of amount spent by RailTel in restoration the link as per SOR B rate of the work involved at site.
- 2.8.22 In no case the Engineer shall be held responsible for the delay in restoration except for the instance of making availability of OFC (if required) for restoration.
- 2.8.23 In the event of urgency, the team has to move to adjacent section, if desired by RailTel. The payment for actual work done, including transportation, will be made as per relevant items of SOR"B".

#### 2.8.24 Examination of Finished Work:

When finished work is taken down for the purpose of inspection for any reason, the contractor shall bear the entire expenses incidental there to in the event that the said work is found to be defective. This situation may be applicable to both planned work as also to emergency restoration.

# 2.9 Mean-Time-To-Restore fibre cuts (MTTR) & Quality of work:

2.9.1 **Response Time:** The maximum response time is 15 minutes from the time RailTel informs the team about the failure. Within this time the maintenance team should move towards the location of fault.

# **Restoration Time:**

- a) The maximum restoration time is response time plus travel time including time for localization and restoration. In any case, the restoration period including excavation & splicing should not exceed six hours wherever easy approach roads are available and it should not exceed eight hours in rural and remote areas where approach roads are difficult.
- **b)** In the sections where cable has been laid by HDD method and immediate restoration in 8 hrs is not possible, the maintenance contractor has to arrange:
  - i) Restoration of link within 24 hrs by drawl of overhead fibre between the adjacent pits to bypass the defective/faulty sub section.
  - ii) Guarding of overhead section till permanent restoration of cable laid by HDD Method.
  - iii) Restoration of cable laid by HDD method within 30 days.
    - No down time will be considered for failure of cable in HDD section. However, this is subject to lying of the overhead OFC to restore the link within 8 hours of the failure taking place.

- However, down time of overhead fibre once drawn for temporary restoration of HDD section, will be considered while calculating the down time for entire billing period.
- c) In case CRT exceeds the prescribed restoration time for the section (6/8 Hrs. for Backbone Network, 8 Hrs. for Access Network (O/H) and 8 Hrs. for Access Network (HDD) on Bi-monthly) penalty for Hours exceeding the CRT shall be imposed as defined in tender document.

# 2.9.2 **Record of Fault Repair Time:**

Time taken by the Contractor from the time of lodging the complaint to the representative of Contractor at their designated office/Head Quarter plus 10 minutes (10 minutes being taken as the lead time for conveying the failure information to the OFC Maintenance Contractor) up to the time of restoration of end-to-end traffic after rectification of OFC cut(s)/fault(s) including the traveling time. The Repair time of any fault occurred shall be calculated by collecting data from respective NOCs of RAILTEL. After restoration of the link, a fault report is to be generated by contractor and obtained joint signature with RAILTEL engineer for records. Any pending restoration of link on account of RailTel shall be certified by Engineer and should not be counted in outage time.

- 2.9.3 If the splice loss of all the fibers are not within the prescribed limit, the contractor has to re-do the splice till the value is achieved failing which RailTel will carry out the work by itself deducting a defined penalty per fault from the monthly bill. If any failure/fault occurs in the rectification work done by the contractor within twelve months from rectification and beyond the validity of contract, due to defective workmanship/supply, the cost of material under warranty found defective will be recovered from contractor's dues/deposit available with RailTel.
- 2.9.4 During the maintenance or fault rectification work, should any damage occur to the Railway QUAD and other cables, contractor is liable to pay compensation as demanded by the Railway authorities.

# 2.10 Monitoring & maintenance at equipment locations:

The supervisor with maintenance team shall carry out preventive maintenance of each STM 64/16/4-1/DWDM long haul node (4-5 per section) once in 15 days. During every visit to the stations for measurements, the contractor staff shall monitor the condition of the electronic/electrical equipment installed for any alarms, order wire, battery voltage.

Periodic watering of earths shall be carried out. Cabling and wiring etc. shall be neatly dressed up.

The equipment shall be cleaned with blower/vaccum cleaner & Engineer assisted for all O&M activities and new equipment installations & advise the status to nominated RailTel Officials. The building/pre-fab housing the equipments and its

surroundings shall be kept clean & tidy by the contractor. In case any discrepancies are observed, the matter should be brought to the notice of the RailTel's Engineer.

- 2.10.1 The contractor will also check the functioning of Power Plant , Air conditioners and DG sets in the RailTel POP and report immediately to Engineer in case of defect or if the temperature at the POP is high. Minor repairs to the Shelter /Building/POP like Water proof sealing of shelter, repair to DOOR handles, WINDOW/DOOR PACKING etc will also be carried out by the contractor without any additional payment.
- 2.10.2 The contractor will test the working of diesel generator by running it for 30 minutes once in a month on load. After monitoring the condition of Diesel Generator (DG set) if filling up of lube oil and or diesel oil is required, the contractor will arrange the same from the nearest petrol pump/depot approved by the Engineer. The cost of lube oil/diesel oil will be reimbursed by RailTel as per actual on production of the receipt. In addition to it, 5% payment will be made towards cartage charges. Consumption of Diesel oil shall be verified based on the hour meter reading provided on the diesel generator. The Engineer in the sections has to maintain a register to keep record of time of failure of electricity, start time and off time of D.G. set, total running hours of DG set etc.

The contractor shall ensure attention to electrical problems associated with 230 V AC supply. The cost of material used in the rectification will be reimbursed as verified from site of work.

2.10.3 Contractor shall also carry out wiring and installation of associated fittings etc. for extending data circuits to customer or as advised by Engineer as and when required, utilizing existing man power resources. Accordingly one technician shall be available in the maintenance team, trained in this type of work. All required material shall be made available by RailTel.

# 2.11 Maintenance Plan:

The Tenderer as part of his Tender has to submit a detailed plan for the maintenance of the network including the details of the man-power and equipments proposed to be located at different sites to cover the jurisdiction as described in "Annexure-C (a, b & c)", the communication facilities, the planned maintenance bases and the detailed plans to fulfill the tender conditions.

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2.11.1 The CONTRACTOR shall submit the list of manpower, machines, equipments and consumable items with quantities suitable to meet the contractual requirements for the jurisdiction described elsewhere in the tender document along with the Tender and make available resources to RailTel officials for inspection, maintenance and corrective measures as and when required.

- 2.11.2 Entry pass shall be issued to the representatives of the contractor by RAILTEL from the respective maintenance stations for handling all maintenance work in Railway area.
- 2.11.3 Submission of monthly & emergency report as desired by Engineer in the Performa specified by RailTel will also be a part of maintenance contract.
- 2.11.4 Supply of OFC, HDPE duct and other accessories: For making good of any break/loss/cut in fiber only OFC, HDPE Duct, Patch cord & 0/10/20 db connector/attenuator shall be supplied by RailTel to the contractor at the nearest RailTel depot or designated/ nominated stores. All other materials including splicing enclosures shall be arranged by contractor including Joint enclosure, Joint chamber and route marker of RCC/FRP free of cost. The material shall be picked up by the contractor in advance from nearest RailTel's depot and shall be accounted with reference to the specific incidence of fiber cuts. The transportation cost on differential distance from nominated stores shall be arranged by RailTel, if applicable.
- 2.12 Supply of consumables/items like Joint enclosure, FRP Jointing pit, Complete Clamps for holding pipe over bridges/culverts etc meeting the specifications as detailed under the Technical specification of the tender document shall be done only after approval of TM. Contractor has to keep stock of above items up to the satisfaction of Engineer.
- 2.12.1 The material issued to the contractor and remaining unutilized after completion of the job shall be returned back to RailTel's designated stores at the end of contract period. A monthly material statement shall be submitted to the Engineer by the contractor.
- 2.12.2 Wherever new joint is provided or existing joint is attended for rectification during the maintenance period, joint shall be properly buried with its top cover being at least 0.6 mtrs below the ground level.
- 2.12.3 Quarterly meeting with EIC along with Engineer and Supervisor/Maintenance team contractor shall be mandatory to assess the progress of work and for pinpointing the constraints to ensure the quality and speed of preventive/ protective maintenance work.

# 2.13 Taking over the section for maintenance:

- a) There should be a proper handing over/taking over of outgoing and incoming contractor. The fiber parameters should be at least as good as or better than these were at the time of taking over the sections by outgoing maintenance team.
- b) The contractor shall complete the OTDR measurement (& power measurements to find out criss-cross of fibers) of all the block sections for all the fibers and submit a joint statement duly signed by the contractor and RailTels Engineer indicating the faults to be attended for making good

of all the non-working fibers. This process shall be completed within 90 days from the date of deployment. As one time drive, all criss-crossing of fiber to be got removed by the contractor to save downtime during failure rectification. This will be done in close co-ordination with Engineer of RailTel.

- c) The Engineer shall also advise the contractor of the faults to be attended to make the fibers good at the cost of RailTel. A separate work Order will be issued by RailTel for such work. This shall be completed in 90 days from the date of advice by RailTel. The payments of the above work will be carried out as per SOR B rates given in the tender.
- **d)** In case the contractor fails to submit the joint report indicating the faults, criss- crossing the fibers to be attended within 45 days from the date of Deployment of team, a defined penalty will be imposed.
- e) Maintenance of all the fibers shall be the sole responsibility of the contractor.
- out on all spare fibers to ascertain the condition of cable, which should be same or better than the condition of the cable taken over by the contract at the beginning of the contract period. In case there is an increase in the number of fiber events at the time of handling over vis-à-vis the number of events at the time of taking over (events/faults more than .5 db), the cost of rectification will be deducted from the final bill of the outgoing team as per the SOR-B rates, the security amount held may also be forfeited. Besides this, OFC route drawings handed over to the contractor at the time of award of work shall be updated fully and submitted to RailTel, both in Hard and Soft copy as given by RailTel incorporating the various changes occurred during the contract period. No dues certificate shall be submitted by the contractor at the time of final bill for SOR-A and SOR-B.
- g) On the advice of Railtel, Tenderer will arrange the separate rectification team for rectification of all the OFC faults and make the fiber good without affecting the regular maintenance as per the scope of work.

# 2.14 **SOR B Items & Methodology for Operating:**

Beside regular maintenance the Contractor has to work for improvement of fibre and for Cable route strengthening work under "SOR - B", as and when communicated by authorized representative of RailTel in writing. The SOR for respective items to be executed in Schedule- B which are enclosed to this tender document. Along with the items the rate for each item is also indicated. If the items are executed, the contractor shall be paid as per rate indicated in Schedule-B.

a. Engineer of the section shall prepare the estimate for faults to be attended as per 2.13b above, get the approval of the Competent

Authority of RailTel and advise the contractor, in writing, to carry out the work.

- b. Separate work order shall be issued for each rectification works (as per clause 2.13 & 2.14) to the contractor (successful tenderer) as per SOR-B rates given in tender document.
- c. Completion period will be specified in work orders as per site condition & nature of urgency.
- d. In the event of failure of Contractor to complete the work within 90 days from the date of issue of such order, Penalty will be imposed as per rule and the work will be entrusted to outside agency, implication if any, arising due to execution of the work by outside agency will have to be borne by the CONTRACTOR i.e. no claim for compensation will be entertained. In case of repeated failure to take up SOR-B work, contractor can be terminated.

### 3. CONDITIONS OF CONTRACT

- 3.1 The CONTRACTOR may quote for one or more OFC sections under jurisdictions described in "Annexure-C".
- 3.2 Before quoting, it is advisable that the prospective Tenderer shall make themselves fully conversant with the locations, OFC routes and types of jobs in details to be carried out therein as per the tender requirement, so that they clearly understand the scope of work and assess the requirement of resources to complete the work in scheduled time.
- 3.5 The CONTRACTOR is deemed to have understood the conditions of existing OFC routes like terrains, various crossings, access details, on-route RailTel's maintenance bases etc., by visiting the sites and collecting first hand information before submission of the offer. In case of any doubt, the clarification may be taken from the RailTel before submission of the offer.
- 3.4 The Contractor shall be totally responsible for the successful execution of the OFC route maintenance contract.
- 3.5 The contractor shall not sub-contract whole or any part of the work.
- 3.6 The data provided in the Tender document shall be used by the Tenderer for reference and information purpose only. It shall be the Tenderer's responsibility to verify the data & satisfy himself in regard to accuracy of data.
- 3.7 The CONTRACTOR shall be responsible for making an arrangement at each maintenance station for excavation works, testing, measuring, splicing equipments, unskilled/skilled manpower, transport facilities for their teams &

- other logistic supports required to maintain end-to-end OFC connectivity in physical layer as per the contract.
- 3.8 The responsibility of the CONTRACTOR shall include provision of preventive measures of OFC routes to avoid damage and cut, deployment of manpower, supply of required materials, erection, installation, testing, documentation, including the related civil works necessary for ensuring the complete end-to-end OFC connectivity in physical layer as described in the tender document at no extra cost to RailTel.
- 3.9 The material used & workmanship shall satisfy the applicable standard Specifications.
- 3.10 RailTel shall be entitled to reject the goods, materials and work executed by the contractor, which may not be conforming to the specifications within a reasonable time of installation of the said goods and materials and charge the contractor for all expenses direct and consequential, incurred thereby.
- 3.11 Where it is mentioned in the specifications that the CONTRACTOR shall perform certain work for completing the job in totality, it is to be understood that the contractor shall do so at his own cost and contract price shall be deemed to have included cost of such performances and provisions so mentioned.
- 3.12 The Contractor to provide safety appliances like: dust masks, safety belt, safety shoes, helmet, hand gloves, safety goggles, rain gears etc to their personnel working.
- 3.13 During any construction work in public places, all precautionary caution boards, barricading sheets as per standard laws & rules to be used by the Contractor.
- 3.14 During the course of execution of the work, if any discrepancy or inconsistency, error or omission in any of the provisions of the contract is discovered which needs to be clarified, the matter shall be referred to Executive Director/RailTel who shall give his decision in the matter and his decision shall be final and conclusive.
- 3.15 The contractor should ensure that the team employed by him shall not move or trespass to areas other than the site(s) required for the execution of the work. Under no circumstances the Contractor should infringe and carry out the work which hampers the Operations and Safety of the Railways, train movements and damage Railway assets. The contractor is responsible for the safety of team members while executing the work in the Railway areas.
- 3.16 The Contractor shall submit along with the offer the list of the number of personnel who will be available permanently for the maintenance works of RailTel. This should include details of technical qualification & minimum experience.

- 3.17 The work is subject to inspection at all times by RailTel officials. The CONTRACTOR shall carry out all instructions given to him or his representatives during inspection.
- 3.18 Any work not conforming to the execution plans, standard specification codes or engineering practice shall be rectified by the CONTRACTOR at his own cost.
- 3.19 Inspection and acceptance of the work shall not relieve the CONTRACTOR from any of his responsibilities under this contract.
- 3.20 The CONTRACTOR shall provide the complete details of planning for items/materials, test/measuring instruments, tools/tackles & manpower to be deployed for the jurisdiction as mentioned in Annexure-C and D with the offer.
- 3.21 The CONTRACTOR shall observe in addition to codes specified in respective specification, all national and local laws, ordinances, rules and regulations and requirements pertaining to work and shall be responsible for any extra costs arising from violations of the same, which shall be borne by the Contractor.
- 3.22 By entering into the maintenance contract with RailTel, the contractor shall agree to maintain the secrecy of all documents/information/drawings etc provided by RailTel during the period of contract and shall handover all the documents back to the RailTel immediately after the termination of the contract.
- 3.23 In case Engineer feels that the contractor is not able to execute the work to the satisfaction of RailTel, RailTel shall at its own discretion can engage other agencies for that incident to ensure the smooth execution of the job at the risk and cost of the contractor, after duly informing him telephonically or through SMS, followed up by a letter.
- 3.24 The CONTRACTOR shall be solely responsible for making available for executing the work, all-requisite construction equipment, special aids, tools, plants and testing equipment and appliances. Such construction equipment etc. shall be subject to examination by RailTel for approval for the same. Any discrepancies pointed out by the RailTel shall be immediately got rectified, repaired or the equipment replaced al-together, by the CONTRACTOR.
- 3.25 The representative of the CONTRACTOR shall take care for not to tamper with the RailTel's installed equipments in the RailTel premises.
- 3.26 Access to the RailTel's facilities shall be allowed to the authorized persons of the CONTRACTOR only with the prior intimation to RailTel's Engineer.
- 3.27 All faults shall be intimated to the CONTRACTOR'S supervisor/ authorized person by either RailTel's Network Operation Centre (NOC) or the Engineer as indicated through telephonic communication, e-mail or through fax. For this the

- CONTRACTOR shall provide RailTel with the contact number, both landline and Mobile & e-mail address / Fax no. within 10 days from the award of the contract.
- 3.28 The locations of repeater/cable route are indicated on the as-built drawings to be supplied by RailTel after award of contract to a successful Tenderer. However, It is advisable that Tenderers must visit site to familiarize themselves with all constraints, restrictions, access requirements and available infrastructure. The CONTRACTOR shall not be eligible for any adjustment in cost and time, on account of any lack of data regarding above. The Contractor may visit the OFC route and satisfy himself before quoting the rate. However, the route details mentioned in Annexure-A are enclosed for reference only.
- 3.29 While executing the job at site by the CONTRACTOR, penalty claimed against any damage caused to the infrastructure of RailTel & other parties shall be borne by the Contractor.
- 3.30 Tenderers are advised to submit their quotations strictly based on the terms, conditions, and specifications in the tender document and not to stipulate any deviations.
- 3.31 Calibration of test and measuring instrument instruments should always be calibrated, instruments like OTDR/splicing machine/power meter to be jointly tested & report signed once every month.
- 3.32 The CONTRACTOR becomes defaulter on the following conditions:
- 3.32.1 If he fails to repair fault and make the OFC link available within 12 hours.
- 3.32.2 Improper maintenance resulting in down time / consumables / loss of parts.
- 3.32.3 Loss or damage to RailTel's property due to the acts of Contractor.
- 3.32.4 In the event of RailTel receiving notice from any statutory authorities or from external agencies on account of loss/damage to their property due to the acts of Contractor.
- 3.32.5 During the contract period, if the CONTRACTOR has defaulted more than once or the defaulting case of the Contractor is severe, then RailTel has the right to terminate the contract and forfeit the security deposit, if deemed necessary.
- 3.33 **ESCALATION**: The maintenance charges quoted by the CONTRACTOR shall be kept firm till the completion of entire period of contract, and no Price Escalation shall be payable on any ground. GST will be paid as per actual at the prevailing rates.
- 3.34 Contractor (successful tenderer) is accountable for timely payment to staff employed by him for the contract.

3.35 The contractor shall indemnify the Company against all losses or damages, if any, caused to it on account of acts of the personnel deployed by him. The contractor shall ensure regular and effective supervision and control of the personnel deployed by him and giving suitable directions for undertaking the contractual obligations.

## 4. PAYMENT TERMS:

### FOR "SOR -A" items:

- 4.1 As per provisions of tender document, payment will be made by RailTel on certification of work by respective Engineer of the section. Submission of bills within 15 days for previously completed two months period is mandatory failing which a penalty as defined shall be charged. Bill of SOR-B and its status shall be sent along with next billing cycle of SOR-A.
- 4.2 Even though the maintenance charges are worked out on a monthly basis, the CONTRACTOR shall be paid once in two months for the maintenance charges for two months period subject to submission of bill along with defined documents.
- 4.2.1 6 identical billing cycles of 2 month period each will be considered during any financial year. The period should be viz. April to May, June to July, Aug to Sept, October to November, December to January & February to March.
- 4.2.2 If the date of LOA is not coinciding with the beginning (1st date of the month) of any period (i.e. 1<sup>st</sup> April/1<sup>st</sup> June/1<sup>st</sup> August etc), the first billing period from the date of issue of LOA will be taken till closure( last date of the month) of instant 2-month period. For example if LOA is issued on 10<sup>th</sup> April, the first billing cycle shall be from 10<sup>th</sup> of April to 31<sup>st</sup> May allowed to be taken proportionately. Subsequently, the billing cycle will continue with the regular 2 Month billing period.
- 4.3 Cumulative Repair time is defined as the total time taken in each billing period of consecutive two months where the link is not available for service in the jurisdiction of the contractor. This does not include the time taken for planned works. If the OFC has to be cut and spliced for a planned work the working fibers shall be made available within 2 hours beyond which the time shall be added to the Cumulative repair time, unless otherwise authorized by RailTel's Engineer. For the situation like flood, fire etc., beyond the control of contractor. Unforeseen circumstances to be decided at the discretion of RailTel, the extra time taken for repair may not be added in the cumulative repair time.
- 4.4 The amount payable against the maintenance charges is dependent upon the Cumulative Repair Time taken by the Contractor for the restoration of all OFC

link cut/faults occurred during each billing period of consecutive two months. Accordingly, the value of the maintenance charges per month shall be decided as per the following:

- 4.4.1 Cumulative Repair Time of the faults in each billing period of consecutive two months Upto 6/8 hours for backbone network, 8 hrs for HDD Network (if failure occurres in HDD section) and 8 hrs for city access overhead network (if failure occurres in overhead section) as applicable: 100 % payment of monthly maintenance charges. However, cost of JE over and above one set (2 nos) in two months (one JE per month) may be reimbursed along with cost of joint pit as per the SoR-B rates. Cost of JE or JE and Joint pit (Material only) has to be reimbursed beyond 2 nos in bi-monthly bill. In case of city access network, this will be applicable only to the section maintained by the contractor free of cost.
- 4.4.4.1 Deduction as defined shall be made from monthly maintenance charges if the Cumulative repair time of the faults in each billing period of consecutive two months exceeds by 2 hours or part thereof.
- 4.4.4.2 Further deduction as defined shall be made from monthly maintenance charges if the Cumulative repair time of the faults in each billing period of consecutive two months exceeds by next two hours or part thereof
- 4.4.4.3 The following documents must be submitted duly certified by the RailTel's Engineer along with the bill for payments for the respective sections:-
  - 1. Month wise cumulative repair time taken.
  - 2. Any other Recovery for contractor's fault.
  - 3. Certificate showing the due Payments have been made to all Team Members by the Contractor as per the prevailing minimum wages act. The tenderer shall furnish an undertaking that he shall indemnify RailTel, being the principal employer, in the event any liability pertaining to employee of tenderer engaged in the current contract.
  - 4. Hand corrected copy of relevant sheets of As Built Drawings with signature of Engineer. (Copy ABD available with Engineer shall also be corrected).
  - 5. EPF, ESI & Wage Register documents of all the employees deployed in the section for last two months. There should be PF A/c & ESI registration No. with the contractor. All the statutory provisions have to be made by the contractor.
- 4.4.4.4 The Penalty imposed on account of various reasons / Slippages in accordance with the conditions stipulated in this document may go up to 50% of Bi-Monthly billed amount for the billing period. In case an agency is repeatedly touches the maximum level of penalty in consecutive billing periods, it will be

treated as default and the contract may be terminated (The idea is to discharge the work in accordance with the contract efficiently rather than having major lapses and keep paying penalty repeatedly).

- 4.5 Price Variation: Price Variation will not be allowed during the validity of contract.
- 4.6 No advance payments will be made.

### **FOR SOR B Item:**

- 4.6.1 100% payment will be paid after completion of work and on certification of RailTel engineer. Deduction of amount as penalty defined in case Non- execution of SOR-B within 3 months. The SOR-B bill has to be submitted within 3 months from the completion of the work.
- 4.6.2 Liquidated damages (LD) @ 0.5% per week subject to maximum of 20 % of the value of the work. Delay may be condoned on request of contractor, if the delay is beyond contractor's scope i.e. Railways/State Govt. Authorities permissions, Natural Calamities like flood etc.
- 4.7 **Warranty period:** All material supplied / used and the work done by the contractor shall be guaranteed against the defective manufacture/workmanship for a period of 24 months. Cost of such defective material shall be recovered from subsequent bills or from 5% amount held (in case validity of contract is over).

## 5. TECHNICAL SPECIFICATIONS

## 5.1 INSTALLATION OF JOINT CLOSURE & SPLICING OF OFC

Only fusion splicing which is accomplished by applying localized heating (i.e. by electric arc or flame) at the interface between two butted, pre-aligned fibre ends, causing them to soften and fuse together, will be used on RailTel's network.

# 5.2 STRAIGHT JOINT FOR FIBRE OPTIC CABLE:

- 5.2.1 There are various types of joint enclosures available in the market. The procedure for assembly of joint enclosure is described in the installation manual supplied with straight joint enclosure. This includes the following:
  - a) Material inside joint closure kit.
  - b) Installation tools required.
  - c) Detailed procedure for cable jointing.
  - d) Procedure for re-opening the closure.
- 5.2.2. The Optic Fiber straight through joint closure (Mechanical seal type) to be used shall be of TVSE, Raychem model, FOSC, 3M make, ROXTEC, Commscope and shall be approved in advance by RailTel. The joint shall be protected CC/Fiber chamber (FRP) as approved by Engineer.

# **Chapter-6**

Upkeep of associated assets (Gears) like Power
Plant, Air conditioners, Voltage stabilizers,
Change over unit, D. G. Sets, Shelters,
Earthing and Wi-Fi equpments

RailTel Corporation of India Ltd.
(A Menisora Category | Linterprise)

### **SCOPE OF WORK:**

- 1. At the time of taken over the section from outgoing maintenance agency, a station wise Joint inspection will be done by RailTel Engineer & Contractor representative to check the functioning of different equipments like Air Conditioners, DG sets, earthing ,power plant and shelters and defects/faults are to be recorded jointly within 30 days from the date of start of maintenance and submit the report about the status of associated equipment within 30 days else it will be deemed that all the equipments installed are in working condition and responsibility for repairing will rest on contractor. One time cost of repairing/replacement of faulty/defective equipment will be borne by RailTel on actual basis.
- 2. Subsequently the contractor shall be responsible for proper & timely upkeep of the associated equipment
- 3. Payment at actual shall be made for parts/components replaced for proper upkeep of associated equipment.

## (A) Upkeep of Power plant equipment:

The contractor will do proper up keep at least once in a month at each station which will consist, but not limited, of the following:

## **Battery Charger:**

- 1. Testing of Auto changeover of SMRs.
- 2. Checking of current setting as per load.
- 3. Checking of input & output voltages and recording the same as per format given in the maintenance manual.
- 4. Checking of extension and reporting of alarms to NMS, wherever provided.
- 5. Checking of proper connection of input and load cables and distribution amendment provided.

#### **Battery Set:**

- 1. Checking and recording of individual cell voltages as per format given in the maintenance manual.
- 2. Checking of conductance of each cell with battery tester once in a quarter supervised by RailTel Engineer.
- 3. Cells whose voltages/conductance is found to be below prescribed value should be noted and Engineer advised.

- 4. Checking of battery voltages at equipment end.
- 5. Checking of proper connection of load cables.
- 6. Cleanliness of battery cells and bank.
- 7. Checking of sulphation/physical damage

## (B) Upkeep of Air Conditioners, Voltage stabilizers and Change over unit:

- 1. Function checking, necessary adjustments, filter checking/cleaning, servicing etc. of AC, Voltage stabilizer, and change over unit at least once in three months time (if required more frequently).
- 2. In case of malfunction of AC machine, voltage stabilizer and change over unit, corrective measures have to take to attend/rectify the failures within 48 hrs failing which penalty of Rs. 180/- (Excl. GST) per day will be levied.
- 3. Any Air Conditioner machine or its spare parts taken for repairing/ replacement should be returned within 3 days of carrying them outside the premises of RailTel and reinstalled by the AC mechanic.
- 4. The contractor will utilize services of trained A.C. mechanic for checking and attending the faults at site at his own cost.
- 5. Defective window type machine should be got repaired within 48 hours from nearest township in case minor defects. However, split type machine has to be maintained/ repaired by deployment of Air-Conditioner mechanic at site. The transportation cost for carrying the breakdown machine to and fro will be on contractor's account.
- 6. Over-hauling of the Room AC machines is to be done once every year during winter.
- 7. The full functioning of change over unit, wherever provided, should be checked once in a quarter.
- 8. A history register is to be maintained to keep record of repair/repairable spares, schedule breakdown details etc.
- 9. Payment, at actual, shall be made for all parts / components (including Gas filling) replaced.

## (C) Upkeep of Diesel Generator Sets:

- 1. Function checking, necessary adjustments, servicing etc. of DG Set will be done once in one month time. This will consist of (but not limited to) the following:
- 2. a. Testing on load. (1/2 Hour on load, once in a month)
  - b. Testing of Auto start in case of AC failure.
  - c. Checking of Hour meter readings.
  - d. Checking of diesel oil/engine oil level/air filters.
  - e. Testing of Battery voltage of DG and its charging.
  - f. Cleanliness of the DG set.
  - g. Checking of frequency on loads.
  - h. Checking Voltage and Current on load.
  - i. Checking of DG earth resistance
  - j. water level in radiator (wherever applicable).

The contractor shall utilize services of trained / authorized D.G. mechanic for checking and attending the faults at site at his own cost.

- 3. All the consumables, Lubricants, Fuels and cleaning agents are to be provided by the contractor. Reimbursement for Lubricant & Diesel oil will be made as per actual, on production of bills plus 5% towards cartage charges to contractor.
- 4. The breakdown machine is to be attended and rectified within 72 hrs failing which penalty of Rs. 455/- per day (Excl. GST) will be levied. Quality of service to be performed should be entire satisfaction of RailTel engineer.
- 5. Any component of DG set taken for repairing/ replacement should be returned within 3 days of carrying them outside the premises of RailTel. The component after due repair should be reinstalled within 3 days from the date of taking the defective component. Removal, refitting of the same shall be done under supervision of train / authorized D.G. mechanic brought by the contractor. The contractor will also be responsible for carrying the defective component for servicing at workshop etc.
- 6. A history register is to be maintained to keep record of repair/repairable spares, schedule breakdown details etc.

### (D) Upkeep of Shelters/Building:

The contractor will do the proper upkeep of shelter once in three months which will consists (but not limited to) of the following:

1. Checking of leakage of water and repairing of the same.

- 2. Tightening the nut & bolt of the shelters in case of loose.
- 3. Minor repair of shelter if any.
- 4. Checking of condition of doors, windows and locking arrangements
- 5. General cleanliness of shelter once in a month.

## (E) Upkeep of Earthing Arrangement

The contractor will do the following activities as per schedule given below:

- 1. Watering of the earth pits on every visit (at least once in a month).
- 2. Checking of the physical connections at equipment ends.
- 3. Tightening of nut/bolts once in a quarter.
- 4. Measurement of earth resistance once in six months under supervision of RailTel Engineer. At least one measurement shall be done during peak summer.

## (F) Upkeep of Wi-Fi System & quipments

The contractor will do the following activities as per schedule given below:

- 1. Visual Inspection of all the system/equipments/wiring: Once in a month.
- 2. Confirming the reachability of all routers and switches: Daily.
- 3. Replacement of faulty equipments with coordination of NOC: As & when required.
- 4. Testing of Access point signal through mobile: Once in a month.
- 5. Testing of Backup of all the UPS (One UPS at a time): Once in a month.
- 6. Visiting station area for any ongoing work to take preventive maintenance with coordination of RLY: Once in a week.
- 7. Maintaining a history register for repair/maintenance/schedule testing etc.

# **Chapter-7**

# Annexure-C (अनुलग्नक-सी)

# **Jurisdiction of OFC Maintenance Sections**

**a)** The OFC section shall have at least one maintenance team stationed at the team headquarters. List of maintenance sections where the maintenance teams are to be deployed is furnished below:

S. No.	Section al HQ	Section Details	Length of Sec. (RKM)	Bimonthly allowed cumulative repair time in hrs.	Type of OFC	Tender Number
1.	Cuttack	Cuttack – Paradeep, Barang – Dhenkenal- Talcher Road-Angul, Paradeep MW - Paradeep Exchange, Rajatgarh – Kapilas Road, Talcher Road- RailTel Talcher, RailTel Talcher - IGIT Talcher (U/G-HDD), RailTel Dhenkanal - DHQ Dhenkenal (U/G- HDD & O/H)	244.28	8 Hrs. Each for U/G, HDD & O/H, if failure occurrs	U/G, HDD & O/H	RailTel/Te nder/OT/E R/HQ/201 8-19/1067, dated 01.01.2019
2	Bhubane swar	Jajpur – Balugaon, Khurda – Puri, Khurda - Khurda MW, Mancheswar - Mancheswar MW – Chandrasekharpur, RCIL Bhubaneswar - Bhubaneswar Idea (HDD link = 4.4 km, Rest U/G), BBS TM Office - Chandrasekharpur Exchange (O/H link), KUR RCIL POP – IIT ARGUL (U/G link)	258.63	8 Hrs. Each for U/G, HDD & O/H, if failure occurrs	U/G, HDD & O/H	RailTel/Te nder/OT/E R/HQ/201 8-19/1068, dated 01.01.2019
3.	Rangiya	Nalbari- Agthori- Rangiya- Tejpur (Dekargaon)	218	8Hrs. for U/G, if failure occurrs	U/G	RailTel/Te nder/OT/E R/HQ/201 8-19/1069, dated 01.01.2019

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4	Guwahati	Dhupdhara - Guwahati – Chaparmukh, Guwahati-Agthori,  Azara RCIL - MRC (O/H), RCIL Baihata- RTL Baihata, Guwahati RCIL – TM Office (O/H), NMS GHY - NMS GHY via Chandmari, VIP road, Reliance six mile, Airtel Sixmile, NIC Dispur, Dishnet G S Road, Dishnet Panbazar. (HDD Fibre), Azara Station - RMC (HDD Fibre), Aghtori IIT Guwahati (HDD Fibre), Guwahati - Maligaon (U/G Fibre), Last mile of AEI (0.630), AMRTON (0.390), RELIANCE (0.300), AIRTEL (0.200), NIC(0.400), SBI (0.500), DISHNET (0.300), IDEA (0.450), Dishnet Panbazar (0.500). (U/G Fibre) (Open Trench), Dishnet 2nd MCS - Regional Dental College (O/H Fibre), Downtown Hospital - NIC Chamber, G. S Road (W/P) (O/H Fibre), AEI Chandmari - New GHY OFC Hut ( O/H Fibre), RCIL NMS - Panbazar (CCBT) W/P (O/H Fibre), RCIL NMS - Panbazar (CCBT) W/P (O/H Fibre), RCIL NMS - Panbazar (CCBT) W/P (O/H Fibre), Azara Station - Decathelon Azara (O/H Fibre), NIC Dispur - CAG Beltala (O/H Fibre), NMS GHY - Assam Textile Institute (O/H Fibre), Azara OFC Room - Krishnakata Handiqu (KKHOU) ( O/H Fibre), Dishnet G S Road - Bhavishynidhi Bhangagar (O/H Fibre), NMS GHY - Assam Textile Institute (O/H Fibre), Azara OFC Room - Krishnakata Handiqu (KKHOU) ( O/H Fibre), Dishnet G S Road - Bhavishynidhi Bhangagar (O/H Fibre), NMS GHY - Assam Textile Institute (O/H Fibre), Azara OFC Room - Krishnakata Handiqu (KKHOU) ( O/H Fibre), Dishnet G S Road - Bhavishynidhi Bhangagar (O/H Fibre), Down Town Hospital - CWC Dispur (O/H Fibre), RCIL Nicker  Textile Institute (O/H Fibre), RCIL Nicker  Textile Insti	284.79	8 Hrs. Each for U/G, HDD & O/H, if failure occurrs	U/G, HDD & O/H	RailTel/Te nder/OT/E R/HQ/201 8-19/1070, dated 01.01.2019
		Fibre), Reliance Sixmile				
		- NIRDPR, Khanapara ( O/H Fibre), NMS				
		Panbazar - Kamrup				

		Academi via Cotton Collegiate (CSR Work) ( O/H Fibre), Maligaon OFC - SBI Maligaon ( O/H Fibre), Maligaon OFC - GM Chamber via TPAAS ( O/H Fibre), Maligaon OFC - GM conference via TPAAS (				
		O/H Fibre), Idea MSC - TM Office (Palton Bazar) ( O/H Fibre), TM office - Paltonbazar chamber (P/P) ( O/H Fibre), Narengi SBI - Nerangi OFC Hut ( O/H Fibre)				
		Dimapur - Diphu - Lumding – Chaparmukh, Chaparmukh – Amoni,		<b>\</b>		
		Dimapur AirTel - Reliance (O/H), Dimapur RCIL - Nagaland university (O/H),		y		
5	Lumding	Dimapur RCIL - S.tel (wkg) (O/H), Dimapur RCIL - S.tel (Prot) (O/H), Dimapur RCIL - Reliance (O/H), Diphu RCIL - S.tel (O/H),	238.32	8 Hrs. Each for U/G &	U/G &	RailTel/Te nder/OT/E R/HQ/201
	Lamang	Lumding RCIL - Idea (O/H) (wkg), Lumding RCIL - Idea (O/H) (Prot), Lumding AirTel - Reliance (O/H), Lumding /Reliance -	230.32	O/H, if failure occurrs	О/Н	8-19/1071, dated 01.01.2019
Ra	ITel	Voda (O/H), Dimapur RCIL- IDEA pop Dimapur, Hojai RCIL-Hojai	tion	of In	dia	Ltd.
	(A.94	Vodafone Pop, Lanka RCIL-Lanka AirTel Pop, Hojai / RCIL - S.tel (O/H) (wkg)	ory 1	Enterpris	(e)	
6	Jorhat	Amguri - Mariani, Mariani - Jorhat, Jorhat - Furkating, Furkating - Dimapur, Furkating - Golaghat - Numaligarh, Simalguri - Amguri, Simalguri - Sibsagar, Jorhat - Numaligarh	325.04	8 Hrs. Each for U/G & O/H, if failure occurrs	U/G & O/H	RailTel/Te nder/OT/E R/HQ/201 8-19/1072, dated 01.01.2019
		Jorhat RCIL - Jorhat OIL, RailTel Jorhat -		OCCUITS		V1.V1.2V1)

		Vodafone (O/H),
		Jorhat Vodafone -
		Relaince (O/H),
		Jorhat Vodafone - Tata
		Tele (O/H),
		Jorhat Relaince -
		Canoro (O/H),
		Jorhat RCIL - Eng
		College (O/H) (wkg),
		Jorhat RCIL - Eng
		College (O/H) (Prot),
		Jorhat RCIL -
		Agricultural University
		(O/H) (wkg),
		Jorhat RCIL -
		Agricultural University
		· ·
		(O/H) (Prot),
		Jorhat RCIL - Idea
		(O/H) (wkg),
		Jorhat RCIL - Idea
		(O/H) (Prot),
		Jorhat RCIL - Medical
		College (O/H),
		Jorhat RCIL - Rain
		Forest (O/H),
		Sarupathar RCIL - S.tel
		(O/H) (wkg),
		Sarupathar RCIL - S.tel
		(O/H) (Prot),
		Amguri RCIL - Uninor
		(O/H) (wkg),
		Amguri RCIL - Uninor
		(O/H) (Prot),,
		Sibsagar RCIL -
		Reliance (O/H) (wkg),
		Sibsagar RCIL -
		Reliance (O/H) (Prot),
		Sibsagar RCIL - Idea
		(O/H) (wkg),
		Sibsagar RCIL-Sivsagar
		Dist HQ,
		RCIL Golaghat-
		Golaghat Dist HQ,
10	ITAL	
Kall	11.50	Sibsagar RCIL - Idea (O/H) (Prot)
		Rainforest Jorhat - Jorhat
	1000	Institute of Sceince &
	11000	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE
		Technology
		Reliance Jorhat Jorhat
		Central Bank of India
		(W/P)
		Reliance Jorhat - Jorhat
		Central Bank of India
		(P/P)
		Oil Chamber - Jorhat
		Central Bank of India
		(W/P)
		RCIL Jorhat to SBI
		Jorhat (W/P) (O/H)
		RCIL Jorhat to SBI
		Jorhat (P/P) (O/H)

7	Tikiri	Singapuram Road – Tikiri -Koraput	163	8 Hrs. for U/G, if failure occurrs	U/G	RailTel/Te nder/OT/E R/HQ/201 8-19/1073, dated 01.01.2019
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**Note:** City Access network will also be maintained by the maintenance team which will be up to around 15 % of total section length.

RailTel also reserves the right to add or delete any maintenance section. However, payment will be made as covered in the preamble.

b) The list of window/split type room air conditioning machines and their section wise location as tabulated hereunder is indicative only. RailTel also reserves the right to add or delete AC's in the sections.

	Tender N	lo. : Ra	ilTel/Te	ender/O	T/ER/H(	Q/2018-	19/1067, da	ted 01.01.	2019
Sl. No.	Team HQ	Statio n	Make	Model	Capacit y	AC type	Date of Installatio n	Stabilise r (5KVA)	Auto sequencer
		CTC	Volta s	Vertis	2*2 TON	Split	30.04.16	NA	NA
		CTC	Godre j	GWC- 18G5	1.5 TON	Wind ow	'JAN-09	NA	NA
		CTC	Godre j	GWC- 18G5	1.5 TON	Wind ow	'JAN-09	NA	NA
1	Cuttack	Angul	Godre j	GWC- 18G5	1.5 TON	Wind ow	'JAN-09	NA	NA
		Angul	Volta s	Vertis	1.5 TON	Wind ow	23.02.16	NA	NA
R	allTe	DNKL	Volta s	Vertis	1.5 TON	Split	23.02.16	NA	NA
	(A	DNKL	Volta s	Vertis	1.5 TON	Split	23.02.16	NA	NA
	Tender N	lo. : Ra	ilTel/Te	ender/O	T/ER/H(	Q/2018 <b>-</b>	19/1068, da	ted 01.01.	2019
Sl. No.	Team HQ	Statio n	Make	Model	Capacit y	AC type	Date of Installatio n	Stabilise r (5KVA)	Auto sequencer
		BBS	Hitac hi	NA	2 TON	Split	30.04.16	1	1
		BBS	Hitac hi	NA	1.5 TON	Split	15.04.16	1	1
2	Bhubanes war	BBS	Volta	Vertis Premiu	2 TON	Split	01.03.11	NA	NA

1.5

TON

Split

16.03.12

NA

NA

m Vertis

Premiu

m

Volta

**BBS** 

		BBS	Volta s	Vertis Premiu	1.5 TON	Wind	15.04.10	NA	NA
		BBS	Volta s	Wertis Premiu m	1.5 TON	Split	23.09.12	NA	NA
		Puri	Hitac hi	NA	1.5 TON	Split	17.06.16	1	1
		Puri	Hitac hi	NA	1.5 TON	Split	17.06.16	NA	NA
		KUR	Volta s	Vertis Premiu m	2 TON	Split	03.01.11	1	1
		KUR	Volta s	Vertis Premiu m	1.5 TON	Wind ow	15.06.05	1	NA
		KUR	Volta s	Vertis Premiu m	1.5 TON	Wind ow	2017	NA	NA
		MCS MW	Volta s	Vertis Premiu m	1.5 TON	Split	2018	NA	NA
		MCS MW	Volta s	Vertis Premiu m	1.5 TON	Split	2018	NA	NA
		BALU	Hitac hi	NA	2 TON	Split	2017	1	1
	Tender N	lo. : Ra	ilTel/T	ender/O	T/ER/H(	Q/2018 <b>-</b>	19/1069, da	ted 01.01.	2019
Sl. No.	Team HQ	Statio n	Make	Model	Capacit y	AC type	Date of Installatio n	Stabilise r (5KVA)	Auto sequencer
3	Rangiya	NA	NA	NA	NA	NA	NA	NA	NA
	Tender No.: RailTel/Tender/OT/ER/HQ/2018-19/1070, dated 01.01.2019								1471
	Tender N	lo. : Ra	l ilTel/Te	< H	- 1	1			
Sl. No.	Tender N Team HQ	No.: Ra Statio	ilTel/Te	V-1	- 1	1	19/1070, da Date of Installatio	ted 01.01. Stabilise	
		Statio	R	ender/O	T/ER/H(	Q/2018- AC	19/1070, da  Date of	ted 01.01.	2019 Auto
		Statio n GHY	Make Volta	ender/O Model	T/ER/H( Capacit y 1.5	Q/2018- AC type	19/1070, da  Date of Installatio n	stabilise r (5KVA)	2019  Auto sequencer
No.	Team HQ	Statio n GHY NOC GHY	Make Volta s Volta	Model 185C Y 185C	T/ER/H( Capacit y 1.5 TON 1.5	AC type Split	Date of Installatio n 04.09.16	Stabilise r (5KVA)	Auto sequencer
		Statio n GHY NOC GHY NOC GHY	Make Volta s Volta s Volta	185C Y 185C Y 185C Y 185C	Capacit y 1.5 TON 1.5 TON 1.5	AC type Split Split	19/1070, da  Date of Installatio n 04.09.16	stabilise r (5KVA)	Auto sequencer  NA  NA
No.	Team HQ	Statio n GHY NOC GHY NOC GHY NOC	Make  Volta s  Volta s  Volta s  Hitac	185C Y 185C Y 185C Y RAW 518K	T/ER/H( Capacit y 1.5 TON 1.5 TON 1.5 TON 1.5	AC type Split Split Split Wind	Date of Installatio n 04.09.16 04.09.16	ted 01.01.  Stabilise     r     (5KVA)  1	Auto sequencer  NA  NA  NA
No.	Team HQ Guwahati	Statio n GHY NOC GHY NOC GHY NOC GHY NOC	Make  Volta s Volta s Volta s Hitac hi	Model  185C Y 185C Y 185C Y RAW 518K UDZ1 RAW 518K UDZ1	T/ER/H( Capacit y 1.5 TON 1.5 TON 1.5 TON 1.5 TON 1.5 TON 1.5 TON	AC type Split Split Split Wind ow Wind ow	19/1070, da  Date of Installatio n  04.09.16  04.09.16  04.09.16  06.07.17	ted 01.01.  Stabilise     r     (5KVA)  1  1  NA	Auto sequencer  NA  NA  NA  NA  NA  NA
No.	Team HQ Guwahati	Statio n GHY NOC GHY NOC GHY NOC GHY NOC	Make  Volta s Volta s Volta s Hitac hi	Model  185C Y 185C Y 185C Y RAW 518K UDZ1 RAW 518K UDZ1	T/ER/H( Capacit y 1.5 TON 1.5 TON 1.5 TON 1.5 TON 1.5 TON 1.5 TON	AC type Split Split Split Wind ow Wind ow	19/1070, da  Date of Installatio n  04.09.16  04.09.16  04.09.16  06.07.17	ted 01.01.  Stabilise     r     (5KVA)  1  1  NA	Auto sequencer  NA  NA  NA  NA  NA  NA

		CPK	Sams ung	NA	1.5 TON	Split	09.09.17	1	1
		СРК	Godr ej	GSC 18 NPZ. RWO U	1.5 TON	Split	15.10.16	1	1
		Amon i	Godr ej	GSC 18 NPZ. RWO U	1.5 TON	Split	15.10.16	1	NA
Tender No.: RailTel/Tender/OT/ER/HQ/2018-19/1072, dated 01.01.2019									
						-			
Sl. No.	Team HQ	Statio n	Make	Model	Capacit y	AC type	Date of Installatio n	Stabilise r (5KVA)	Auto sequencer
No.			Make Hitac	Model Twin	_	AC	Date of Installatio	r	Auto
	Team HQ  Jorhat	n	Hitac	1	y 1.5	AC type	Date of Installatio n	r (5KVA)	Auto sequencer
No.	Jorhat	JRT MXN	Hitac hi Volta	Twin Single	1.5 TON 1.5 TON	AC type Split Split	Date of Installatio n	r (5KVA) NA NA	Auto sequencer  1  NA
No.	Jorhat	JRT MXN	Hitac hi Volta	Twin Single	1.5 TON 1.5 TON	AC type Split Split	Date of Installatio n 11.08.17 09.11.10	r (5KVA) NA NA	Auto sequencer  1  NA

C) The list of 5/7.5/15 KVA, Single / three Phases, Air Cooled, Diesel Generator (Silent type) and section wise location as tabulated hereunder is indicative only. RailTel also reserves the right to add or delete DGs in the section.

Sr. No.	Team HQ	Station	DG Set Installed	Make	Model	Date of Installation
	ailTel	CTC	15 KVA	EICHER	322ES/1152	11.08.06
1	Cuttack	DNKL	15 KVA	EICHER	322ES/1152	01.01.07
		Angul	15 KVA	EICHER	322ES/1152	28.11.06
7	Tender No. :	RailTel/	Tender/OT/	ER/HQ/201	8-19/1068, da	ted 01.01.2019
Sr.	Team HQ	Statio n	DG Set Installed	Make	Model	Date of Installation
No.		IZLID	15 KVA	KIRLOSK ER	EA20	21.04.10
<b>No.</b> 2	Bhubaneswar	KUR		211		

Sr. No.	Team HQ	Statio n	DG Set Installed	Make	Model	Date of Installation		
3	Rangiya	NA	NA	NA	NA	NA		
Т	Tender No.: RailTel/Tender/OT/ER/HQ/2018-19/1070, dated 01.01.2019							
Sr. No.	Team HQ	Statio n	DG Set Installed	Make	Model	Date of Installation		
4	Guwahati	GHY NOC	15 KVA	KIRLOSK ER	SEKG-15A36	03.05.13		
Т	Tender No.: RailTel/Tender/OT/ER/HQ/2018-19/1071, dated 01.01.2019							
Sr. No.	Team HQ	Statio n	DG Set Installed	Make	Model	Date of Installation		
5	Lumding	NA	NA	NA	NA	NA		
Т	Cender No. :	RailTel/	Fender/OT/I	ER/HQ/201	8-19/1072, da	ted 01.01.2019		
Sr. No.	Team HQ	Statio n	DG Set Installed	Make	Model	Date of Installation		
6	Jorhat	NA	NA	NA	NA	NA		
Т	Cender No. :	RailTel/	Fender/OT/I	ER/HQ/201	8-19/1073, da	ted 01.01.2019		
Sr. No.	Team HQ	Statio n	DG Set Installed	Make	Model	Date of Installation		
7	Tikiri	NA	NA	NA	NA	NA		

# RAILTEL

RailTel Corporation of India Ltd.

(A Minimum Calegory | Linterprise)

# **Chapter-8**

Annexure-D (अनुलग्नक—डी)

Minimum Man & Machine/Equipments required to be engaged under one Maintenance Team:

## (a) Manpower:

- 1. Experienced Supervisor: (Preferably Diploma Holder in Electronics, Electrical or Graduate with relevant Experience in field work,) additional experience in the field of AC machine, DG sets will be desirable
- 2. Technician for Splicing & Measurements (main splicer).
- 3. Electrical Technician for maintenance of Power Plant, DG sets, AC unit, wiring etc.
- 4. Patrollers with cell phone for surveillance, liaison and foot patrolling and train patrolling (one Man for about 50-60 kms beat). However the contractor has to deploy extra manpower for as and when needed during any Railway work or other agencies work in the section.
- 5. Bike patrollers for surveillance in city access cable area for 50-60 Kms.
- 6. Two Un-skilled manpower for trenching etc.
- 7. Driver of the vehicle.
- 8. One Diploma Engineer (ECE/CSE/IT) & one Non-technical person for up keeping of Wi-Fi system provided at various stations in the section.

### (b) Vital Machines/ Equipments:

- Innova/ Qualis/Scorpio or equivalent Utility Vehicle for transportation of men, machines and stores, Vehicle shall be in good working condition should not be more than three years old.
- 2. Portable Generator set Kirlosker/Honda/Eicher or similar make, lighting arrangement like emergency light/gas light.
- 3. Fusion Splicing Machine with 2 cleavers, Fujikura/Fitel/INNO Korea or similar make.
- 4. Power Source and Power Meter, JDSU/Anritsu/Yokagawa or similar make.
- 5. OTDR (Minimum range 200 Kms), Anritsu/JDSU/Yokagawa or similar make.
- 6. OFC cable Route Detector

- 7. Spare battery with charger for splicing machine.
- 8. Cable Splitter for vertical cutting of PVC sheath & armour
- 9. All sorts of patch-cords and connectors for the purpose of measurement
- 10. Duct Cutter
- 11. Road-o-meter.
- 12. Clamp type earth megger and clamp type AC/DC multimeter
- 13. Communication Gadget: As required (Telephone, Cell phone, E-Mail etc.)
- 14. Tool/Tackles kit.
- 15. Blow lamp/ hot air gun for sealing joint closure.
- 16. 1 Km. length dummy fiber spool.
- 17. 500 Mtr. Aerial OFC having 24 fibers.
- 18. Minimum 50 Mtr. Duct with couplers
- 19. Rexene/Polythene & Umbrella cover etc.
- 20. Portable vacuum cleaner, Eureka Forbes/Bosch/Phillips or similar make.
- 21. Alluminium Ladder for maintenance of Wi-Fi Equipments.

Note: OFC test and measuring instruments must have been calibrated in a year once from an established national Testing Organization/ lab. Upto date Certificates should always be available.

Manpower and equipments should be available with the maintenance teams round the clock as listed above. However contractor can add more manpower & equipments for speedy maintenance & minimizing downtime without any extra cost implications to RailTel.

In case the main Splicer of the team is on leave, standby Splicer must be arranged in advance by the contractor In case of absence of supervisor/ technician/splicer/patrolmen from site except sanctioned leave granted in consultation with RailTel engineer (indicated in item (a) 1 to 8 in list given above), penalty as defined will be deducted.

No man power or equipment can be changed without prior ascertaining the suitability by the Engineer & his approval. Each such change shall be pre-reported in writing to Engineer.

# **Chapter-9**

# Annexure-E (अनुलग्नक-ई)

# <u>Penalty to be imposed for the non-compliance/defenciency in the maintenance of OFC, AC, DG and Wi-Fi system covered under this maintenance contract:</u>

S No.	Description of deficiencies	Penalty Rate (Excl. GST) Rs.
1	Non-submission / non-modification of as built drawing (Only modifications made to be submitted)	Rs. 910/- per fault
2	Non-submission of OTDR traces to be taken before and after rectification of cable fault /cut (involving two joints). If OTDR traces is submitted within next billing cycle, the penalty will be returned back to the contractor.	Rs. 4540/- per section
3	For provision of joint pit within 30 days, no penalty. From 31 day to 60 days, penalty of Rs. 4540/- per joint pit and from 61 days to 90 days penalty of Rs. 9080/- per joint pit. <b>After 90 days, case will be considered for termination.</b>	
4	Swapped fibers not restored (involving at least one joint)	Rs. 4540/-
5	Cable laid during fault restoration / rectification (small length) at lesser depth without protection.	Accepted rate of respective SOR – B + 20 % )
6	Cable laid temporarily over bridges and leads to subsequent failure (involving two joint).	Rs 2 x (accepted rate of respective SOR – B + 20 %)
7	Splice loss of all fibers not within prescribed limit (0.05 db per splice)	Rs. 5450/-
8	In case MTTR exceeds the prescribed restoration time for the section 6/8 Hrs Bimonthly for backbone network and 8 Hrs for access network)	Rs. 4540/- per two hours or part thereof.
9	Unavailability of communication with maintenance team/patroller	Rs. 910/- per day
10	Non-Submission of OTDR reading and Power meter readings of all fibers (Once in a four month).	Rs. 4540/- per section+ Rs. 2270/- for every week or part thereof till the next periodical report falls due
11	Failure or non availability of Transport/Vehicle.	Actual cost of hiring alternative vehicle + Rs. 910/- each trip from monthly bill. (Per day)
12	Non Submission of joint report indicating the fault to be attended within 90 days from Date of deployment of team	Rs. 2270/- per week or part therefore beyond 90 days up to next 45 Days from the date of deployment of the team.
13	Non Submission of bill for previously completed two months within 15 days of completion of billing period.	Rs. 180/- per week beyond 10 days upto next billing cycle, subsequently Rs. 455/- per week.

14	Absence of Supervisor/ Technician/ Splicer/ Helper/ Patrolmen etc. from site. (indicated in item (a) 1 to 7 of Annexure-D).	Rs. 355/- per day each for patroller, Technician, Helper and assistant splicer and Rs. 910/- per day each for supervisor & Splicer (If the person is under sanctioned leave then it should be in knowledge of Engineer and contractor should deploy another person in place of absent person).
15	Non availability of Vital equipments (Except vehicle)	Rs. 455/- per day
16	If foot /bi-cycle patrolling not done	Rs. 545/- for one time-per block/sub section in a month( i.e. if foot patrolling not done in a month for one sub/block section penalty per month imposed will be 3x545 = Rs. 1635/- per month since three times in a month to be done)
17	Non-execution of SOR-B work within 3 months	20% of the cost of SOR-B work from SOR-A bill of that period (work communicated in writing by authorized representative of RailTel)
	AIRCONDITIONER MAINTENANCE	
18	Breakdown duration exceeding 48 hrs	Rs 180/- per day
19	Non- Maintenance of Faulty AC within 03 months (in case of faulty before joining of team)	Rs. 180/- per day
	DG SET MAINTENANCE	
20	Breakdown duration exceeding 72 hrs.	Rs 455/- per day
21	Non- Maintenance of Faulty DG within 03 months (in case of faulty before joining of team)	Rs. 455/- per day
22	Upkeep of shelter/earthing arrangement /power plant etc.	Rs. 215/- per day per location.
23	Joint Marker	Penalty Rs. 910/- per joint marker for non provisioning of Joint marker within 30 days
24	Criss crossing of fibers during carrying out the SOR A works.	Rs. 1820/- per joint
25	Absence of Diploma Engineer (ECE/CSE/IT) for up keeping of Wi-Fi system	Rs. 910/- per day
26	Absence of Non-Technical person for up keeping of Wi-Fi system	Rs. 355/- per day
27	Penalty (Per Day) for Wi-Fi Sustem/ Equipments not attended within 24 Hrs.	Rs. 1700/- per day
28	Penalty for excess time in restoration of failure in case of 0/10/20 dB/ Patch cord faulty (exceeding 02 hours)	Rs. 4540/- per two hours or part thereof.

# **Chapter-10**

Annexure-F (अनुलग्नक-एफ)

# **Schedule of Rates-A (SOR-A)**

# (For maintenance of OFC and associated gears like AC, DG, Stabilizer,

## **Change over unit, Shelter and Wi-Fi Equipments**)

(Tenderers to fill-in the rates for the sections in which they intend to participate & strike-out the others)

## Tender No.: RailTel/Tender/OT/ER/HQ/2018-19/1067-73, dated 01.01.2019

# Description of work (Applicable to all the sections indicated below)

Maintenance charges to undertake all preventive and corrective maintenance of OFC cable network and upkeep of associated gears like AC, DG, Stabilizer, Change over unit, Shelter and Wi-Fi Equipments in Cuttack, Bhubaneswar, Rangiya, Guwahati, Lumding, Jorhat & Tikiri section of RCIL/ER as per terms & conditions given in the tender document (page no. 25 to 36 of item no. 2.1 to 2.13.

# Tender No.: RailTel/Tender/OT/ER/HQ/2018-19/1067-73, dated 01.01.2019

S. No.	Sectional HQ	Section Details	Length of Sec. (KM)	Maintenance charges of the section PER Km. PER Month (Rs) [in Figures & in Words] Excl. GST	Total Maintenance charges of the section for Three Years (Rs.) [In Figures & in Words) Excl. GST
ı Ra	Cuttack	Cuttack – Paradeep, Barang – Dhenkenal- Talcher Road-Angul, Paradeep MW - Paradeep Exchange, Rajatgarh – Kapilas Road, Talcher Road- RailTel Talcher, RailTel Talcher - IGIT Talcher (U/G-HDD),	244.28	India	Ltd.
	(A Ri	RailTel Dhenkanal - DHQ Dhenkenal (U/G-HDD & O/H)		erprise)	
2	Bhubanes war	Jajpur – Balugaon, Khurda – Puri, Khurda - Khurda MW, Mancheswar - Mancheswar MW – Chandrasekharpur, RCIL Bhubaneswar - Bhubaneswar Idea (HDD link = 4.4 km, Rest U/G), BBS TM Office - Chandrasekharpur Exchange (O/H link), KUR RCIL POP – IIT ARGUL (U/G link)	258.63		

Dhupdhara - Guwahati — Chaparmukh, Guwahati-Agthori,  Azara RCIL - MRC (O/H), RCIL Baihata- RTL Baihata, Guwahati RCIL – TM Office (O/H), NMS GHY - NMS GHY via Chandmari, VIP road, Reliance six mile, Airtel Sixmile, NIC Dispur, Dishnet G S Road, Dishnet Panbazar. (HDD Fibre), Azara Station - RMC (HDD Fibre), Aghtori -	3.	Rangiya	Nalbari- Agthori- Rangiya- Tejpur (Dekargaon)	218	
IIT Guwahati (HDD Fibre), Guwahati - Maligaon (U/G Fibre), Last mile of AEI (0.630), AMRTON (0.390), RELIANCE (0.300), AIRTEL (0.200), NIC(0.400), SBI (0.500), DISHNET(0.300), IDEA (0.450), Dishnet Panbazar (0.500). (U/G Fibre) (Open Trench), Dishnet 2nd MCS - Regional Dental College (O/H Fibre), Downtown Hospital - NIC Chamber, G. S Road (W/P) (O/H Fibre), AEI Chandmari - New GHY OFC Hut (O/H Fibre), RCIL NMS - Panbazar (CCBT) W/P ( O/H Fibre), Azara Station - Decathelon Azara (O/H Fibre), Downtown University - Panikhati OFC (W/p) (O/H Fibre), RMC - Airport (O/H Fibre), NIC Dispur - CAG Beltala (O/H Fibre), NMS	4	Guwahati	Chaparmukh, Guwahati-Agthori,  Azara RCIL - MRC (O/H), RCIL Baihata- RTL Baihata, Guwahati RCIL - TM Office (O/H), NMS GHY - NMS GHY via Chandmari, VIP road, Reliance six mile, Airtel Sixmile, NIC Dispur, Dishnet G S Road, Dishnet Panbazar. (HDD Fibre), Azara Station - RMC (HDD Fibre), Aghtori - IIT Guwahati (HDD Fibre), Guwahati - Maligaon (U/G Fibre), Last mile of AEI (0.630), AMRTON (0.390), RELIANCE (0.300), AIRTEL (0.200), NIC(0.400), SBI (0.500), DISHNET(0.300), IDEA (0.450), Dishnet Panbazar ( 0.500). (U/G Fibre) (Open Trench), Dishnet 2nd MCS - Regional Dental College ( O/H Fibre), Downtown Hospital - NIC Chamber, G. S Road ( W/P) ( O/H Fibre), AEI Chandmari - New GHY OFC Hut ( O/H Fibre), RCIL NMS - Panbazar (CCBT) W/P ( O/H Fibre), Azara Station - Decathelon Azara ( O/H Fibre), Downtown University - Panikhati OFC (W/p) ( O/H Fibre), RMC - Airport ( O/H Fibre), NIC Dispur - CAG	EL on of	 Ltd.

(KKHOU) ( O/H Fibre),	
Dishnet G S Road -	
Bhavishynidhi Bhangagar	
( O/H Fibre), Down Town	
Hospital - CWC Dispur (	
O/H Fibre), Reliance	
Sixmile - NIRDPR,	
Khanapara ( O/H Fibre),	
NMS Panbazar - Kamrup	
Academi via Cotton	
Collegiate (CSR Work) (	
O/H Fibre), Maligaon	
OFC - SBI Maligaon (	
O/H Fibre), Maligaon	
OFC - GM Chamber via	
TPAAS (O/H Fibre),	
Maligaon OFC - GM	
conference via TPAAS (	
O/H Fibre), Idea MSC -	
TM Office (Palton Bazar)	
(O/H Fibre), TM office -	
Paltonbazar chamber (P/P)	
` '	
(O/H Fibre), Narengi SBI	
- Nerangi OFC Hut ( O/H	
Fibre)	
Dimapur - Diphu -	
Lumding – Chaparmukh,	
Chaparmukh – Amoni,	
Dimapur AirTel -	
Reliance (O/H),	
Dimapur RCIL -	
Nagaland university	
(O/H),	
Dimapur RCIL - S.tel	
(wkg) (O/H),	
Dimapur RCIL - S.tel	
(Prot) (O/H),	
Dimapur RCIL - Reliance	2012/01/20
(O/H),	103
Diphu RCIL - S.tel (O/H),	Section Section 1
5 Lumding Lumding RCIL - Idea 238.32	
(O/H) (wkg),	
Lumding RCIL - Idea	
(O/H) (Prot),	
Lumding AirTel -	
Reliance (O/H),	
Lumding /Reliance - Voda	
(O/H),	
Dimapur RCIL- IDEA pop	
Dimapur,	
Hojai RCIL-Hojai Vodafona Pop	
Vodafone Pop,	
Lanka RCIL-Lanka AirTel	
Pop,	
Hojai / RCIL - S.tel (O/H)	
(wkg)	Į.

Amguri - Mariani, Mariani			
Jorhat - Furkating, Furkating - Dimapur, Furkating - Golaghat - Numaligarh, Simalguri - Amguri, Simalguri - Sibsagar, Jorhat - Numaligarh  Jorhat RCIL - Jorhat OIL, RailTel Jorhat - Vodafone (O/H), Jorhat Vodafone - Relaince (O/H), Jorhat Vodafone - Tata Tele (O/H), Jorhat Relaince - Canoro (O/H), Jorhat RCIL - Eng College (O/H) (wkg), Jorhat RCIL - Eng College (O/H) (wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - S.tel (O/H), Wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (Wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			Amguri - Mariani, Mariani
Furkating - Dimapur, Furkating - Golaghat - Numaligarh, Simalguri - Amguri, Simalguri - Sibsagar, Jorhat - Numaligarh  Jorhat RCIL - Jorhat OIL, RailTel Jorhat - Vodafone (O/H), Jorhat Vodafone - Relaince (O/H), Jorhat Vodafone - Tata Tele (O/H), Jorhat Relaince - Canoro (O/H), Jorhat RCIL - Eng College (O/H) (Wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (Wkg), Jorhat RCIL - Agricultural University (O/H) (Wkg), Jorhat RCIL - Idea (O/H) (Wkg), Jorhat RCIL - Idea (O/H) (Wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - S.tel (O/H), Jorhat RCIL - S.tel (O/H) (Wkg), Sarupathar RCIL - S.tel (O/H) (Wkg), Sarupathar RCIL - S.tel (O/H) (Wkg), Amguri RCIL - Uninor (O/H) (Wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			- Jorhat,
Furkating - Golaghat – Numaligarh, Simalguri – Amguri, Simalguri – Sibsagar, Jorhat – Numaligarh  Jorhat RCIL - Jorhat OIL, RailTel Jorhat - Vodafone (O/H), Jorhat Vodafone - Relaince (O/H), Jorhat Vodafone - Tata Tele (O/H), Jorhat RCIL - Eng College (O/H) (Wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (Wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) ((wkg), Jorhat RCIL - Idea (O/H) ((wkg), Jorhat RCIL - Idea (O/H) ((wkg), Jorhat RCIL - Idea (O/H) ((yrot), Jorhat RCIL - Reliance  6  Jorhat  Agricultural University (O/H) (Prot), Jorhat RCIL - S.tel (O/H) (Prot), Jorhat RCIL - S.tel (O/H) (Wkg), Sarupathar RCIL - S.tel (O/H) (Wkg), Amguri RCIL - Uninor (O/H) (Wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			Jorhat - Furkating,
Furkating - Golaghat – Numaligarh, Simalguri – Amguri, Simalguri – Sibsagar, Jorhat – Numaligarh  Jorhat RCIL - Jorhat OIL, RailTel Jorhat - Vodafone (O/H), Jorhat Vodafone - Relaince (O/H), Jorhat Vodafone - Tata Tele (O/H), Jorhat RCIL - Eng College (O/H) (Wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (Wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) ((wkg), Jorhat RCIL - Idea (O/H) ((wkg), Jorhat RCIL - Idea (O/H) ((wkg), Jorhat RCIL - Idea (O/H) ((yrot), Jorhat RCIL - Reliance  6  Jorhat  Agricultural University (O/H) (Prot), Jorhat RCIL - S.tel (O/H) (Prot), Jorhat RCIL - S.tel (O/H) (Wkg), Sarupathar RCIL - S.tel (O/H) (Wkg), Amguri RCIL - Uninor (O/H) (Wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			Furkating – Dimapur,
Numaligarh, Simalguri - Amguri, Simalguri - Sibsagar, Jorhat - Numaligarh  Jorhat RCIL - Jorhat OIL, RailTel Jorhat - Vodafone (O/H), Jorhat Vodafone - Relaince (O/H), Jorhat Vodafone - Tata Tele (O/H), Jorhat Relaince - Canoro (O/H), Jorhat Relaince - Canoro (O/H), Jorhat RCIL - Eng College (O/H) (wkg), Jorhat RCIL - Eng College (O/H) (prot), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Red (O/H) (wkg), Jorhat RCIL - Red (O/H) (prot), Jorhat RCIL - Idea (O/H) (prot), Jorhat RCIL - S.tel (O/H), (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (prot), Sibsagar RCIL - Reliance			
Simalguri – Amguri, Simalguri – Sibsagar, Jorhat – Numaligarh  Jorhat RCIL - Jorhat OIL, RailTel Jorhat - Vodafone (O/H), Jorhat Vodafone - Relaince (O/H), Jorhat Vodafone - Tata Tele (O/H), Jorhat RCIL - Eng College (O/H) (Wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (Wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (Wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - S.tel (O/H), Sarupathar RCIL - S.tel (O/H) (Wkg), Sarupathar RCIL - Uninor (O/H) (Wkg), Amguri RCIL - Uninor (O/H) (Wkg), Amguri RCIL - Uninor (O/H) (Wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
Simalguri – Sibsagar, Jorhat – Numaligarh  Jorhat RCIL - Jorhat OIL, RailTel Jorhat - Vodafone (O/H), Jorhat Vodafone - Relaince (O/H), Jorhat Vodafone - Tata Tele (O/H), Jorhat RCIL - Eng College (O/H) (wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Eng College (O/H) (Wkg), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (prot), Jorhat RCIL - Rain Forest (O/H), Jorhat RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
Jorhat – Numaligarh  Jorhat RCIL - Jorhat OIL,  RailTel Jorhat - Vodafone (O/H),  Jorhat Vodafone - Relaince (O/H),  Jorhat Vodafone - Tata Tele (O/H),  Jorhat RCIL - Eng College (O/H) (wkg),  Jorhat RCIL - Eng College (O/H) (Prot),  Jorhat RCIL - Agricultural University (O/H) (wkg),  Jorhat RCIL - Idea (O/H) ((Prot),  Jorhat RCIL - Idea (O/H) ((Prot),  Jorhat RCIL - Rain Forest (O/H),  Sarupathar RCIL - S.tel (O/H) (wkg),  Sarupathar RCIL - S.tel (O/H) (Prot),  Amguri RCIL - Uninor (O/H) (Wkg),  Amguri RCIL - Uninor (O/H) (Prot),  Sibsagar RCIL - Reliance			
Jorhat RCIL - Jorhat OIL, RailTel Jorhat - Vodafone (O/H), Jorhat Vodafone - Relaince (O/H), Jorhat Vodafone - Tata Tele (O/H), Jorhat RCIL - Eng College (O/H) (wkg), Jorhat RCIL - Eng College (O/H) (wkg), Jorhat RCIL - Hagricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (prot), Jorhat RCIL - Idea (O/H) (prot), Jorhat RCIL - Rain Forest (O/H), Jorhat RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
OIL, RailTel Jorhat - Vodafone (O/H), Jorhat Vodafone - Relaince (O/H), Jorhat Vodafone - Tata Tele (O/H), Jorhat Relaince - Canoro (O/H), Jorhat RCIL - Eng College (O/H) (Wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (Wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Rain Forest (O/H), (O/H), Sarupathar RCIL - S.tel (O/H) (Wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (Wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			Joinat Humangam
OIL, RailTel Jorhat - Vodafone (O/H), Jorhat Vodafone - Relaince (O/H), Jorhat Vodafone - Tata Tele (O/H), Jorhat Relaince - Canoro (O/H), Jorhat RCIL - Eng College (O/H) (Wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (Wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Rain Forest (O/H), Jorhat RCIL - S.tel (O/H) (Wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (Wkg), Amguri RCIL - Uninor (O/H) (Wkg), Sibsagar RCIL - Reliance			Iorhat RCII Iorhat
RailTel Jorhat - Vodafone (O/H), Jorhat Vodafone - Relaince (O/H), Jorhat Vodafone - Tata Tele (O/H), Jorhat Relaince - Canoro (O/H), Jorhat RCIL - Eng College (O/H) (wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - S.tel (O/H), Sarupathar RCIL - S.tel (O/H) (Wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (Wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
(O/H), Jorhat Vodafone - Relaince (O/H), Jorhat Vodafone - Tata Tele (O/H), Jorhat Relaince - Canoro (O/H), Jorhat RCIL - Eng College (O/H) (wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (prot), Jorhat RCIL - Idea (O/H) (prot), Jorhat RCIL - S.tel (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (prot), Sibsagar RCIL - Reliance			
Jorhat Vodafone - Relaince (O/H), Jorhat Vodafone - Tata Tele (O/H), Jorhat Relaince - Canoro (O/H), Jorhat RCIL - Eng College (O/H) (wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - S.tel (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot),, Sibsagar RCIL - Reliance			
Relaince (O/H), Jorhat Vodafone - Tata Tele (O/H), Jorhat Relaince - Canoro (O/H), Jorhat RCIL - Eng College (O/H) (wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
Jorhat Vodafone - Tata Tele (O/H), Jorhat Relaince - Canoro (O/H), Jorhat RCIL - Eng College (O/H) (wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - Rain Forest (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot),, Sibsagar RCIL - Reliance			
Tele (O/H), Jorhat Relaince - Canoro (O/H), Jorhat RCIL - Eng College (O/H) (wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - S.tel (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
Jorhat Relaince - Canoro (O/H), Jorhat RCIL - Eng College (O/H) (Wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (Wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - Rain Forest (O/H), Sarupathar RCIL - S.tel (O/H) (Wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (Wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
(O/H), Jorhat RCIL - Eng College (O/H) (wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - S.tel (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot),, Sibsagar RCIL - Reliance			
Jorhat RCIL - Eng College (O/H) (wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - S.tel (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
College (O/H) (wkg), Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - Rain Forest (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Wkg), Sibsagar RCIL - Reliance			
Jorhat RCIL - Eng College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - Rain Forest (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
College (O/H) (Prot), Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - S.tel (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
Jorhat RCIL - Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - S.tel (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
Agricultural University (O/H) (wkg), Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - Rain Forest (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
(O/H) (wkg),     Jorhat RCIL -     Agricultural University     (O/H) (Prot),     Jorhat RCIL - Idea (O/H)     (wkg),     Jorhat RCIL - Idea (O/H)     (Prot),     Jorhat RCIL - Medical     College (O/H),     Jorhat RCIL - Rain Forest     (O/H),     Sarupathar RCIL - S.tel     (O/H) (wkg),     Sarupathar RCIL - S.tel     (O/H) (Prot),     Amguri RCIL - Uninor     (O/H) (wkg),     Amguri RCIL - Uninor     (O/H) (Prot),     Sibsagar RCIL - Reliance			
Jorhat RCIL - Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - Rain Forest (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
Agricultural University (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - Rain Forest (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
6 Jorhat (O/H) (Prot), Jorhat RCIL - Idea (O/H) (wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - Rain Forest (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
Jorhat RCIL - Idea (O/H)  (wkg),  Jorhat RCIL - Idea (O/H)  (Prot),  Jorhat RCIL - Medical  College (O/H),  Jorhat RCIL - Rain Forest  (O/H),  Sarupathar RCIL - S.tel  (O/H) (wkg),  Sarupathar RCIL - S.tel  (O/H) (Prot),  Amguri RCIL - Uninor  (O/H) (wkg),  Amguri RCIL - Uninor  (O/H) (Prot),  Sibsagar RCIL - Reliance			
(wkg), Jorhat RCIL - Idea (O/H) (Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - Rain Forest (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance	6	Jorhat	
Jorhat RCIL - Idea (O/H)  (Prot),  Jorhat RCIL - Medical  College (O/H),  Jorhat RCIL - Rain Forest  (O/H),  Sarupathar RCIL - S.tel  (O/H) (wkg),  Sarupathar RCIL - S.tel  (O/H) (Prot),  Amguri RCIL - Uninor  (O/H) (wkg),  Amguri RCIL - Uninor  (O/H) (Prot),,  Sibsagar RCIL - Reliance			
(Prot), Jorhat RCIL - Medical College (O/H), Jorhat RCIL - Rain Forest (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
Jorhat RCIL - Medical College (O/H), Jorhat RCIL - Rain Forest (O/H), Sarupathar RCIL - S.tel (O/H) (wkg), Sarupathar RCIL - S.tel (O/H) (Prot), Amguri RCIL - Uninor (O/H) (wkg), Amguri RCIL - Uninor (O/H) (Prot), Sibsagar RCIL - Reliance			
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(O/H) (wkg),			
Sibsagar RCIL - Reliance			
(O/H) (Prot),			
Sibsagar RCIL - Idea			
(O/H) (wkg),			
Sibsagar RCIL-Sivsagar			
Dist HQ,			
RCIL Golaghat			
Dist HQ,			
Sibsagar RCIL - Idea			
(O/H) (Prot)			
Rainforest Jorhat - Jorhat			Rainforest Jorhat - Jorhat

		Institute of Sceince & Technology Reliance Jorhat- Jorhat Central Bank of India (W/P) Reliance Jorhat - Jorhat Central Bank of India (P/P) Oil Chamber - Jorhat Central Bank of India (W/P) RCIL Jorhat to SBI Jorhat (W/P) (O/H) RCIL Jorhat to SBI Jorhat		
		RCIL Jorhat to SBI Jorhat (P/P) (O/H)		
7	Tikiri	Singapuram Road – Tikiri -Koraput	163	



RailTel Corporation of India Ltd.

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# **Chapter-11**

# Schedule of Rates -B (SOR-B)

# For OFC Route strengthening & Diversion works:

SN	Item	Description	Unit	Unit Rate (Rs.) Excl. GST
1	FRP / RCC Chambers	Supply & installation of joining pit as per drawing with cover and required trenching to ease out cable/duct		
1 A	RCC Chambers	Supply, transportation and installation of RCC joint chamber with two piece top cover and bottom cover with holes for drainage and cable entry, as per drawing no.  RCIL/ER/DRG-02/06. (Reinforcement drawing enclosed). This includes trenching for jointing pt, backfilling and ramming of the pit after placing the joint closure and cable loop in the chamber without causing any damage to the same and consolidation of soil as well as disposal of excess soil.	No.	3055/-
1 B	FRP Chambers	Supply, transportation and installation of FRP joint chamber with top cover and bottom cover with holes for drainage and cable entry, as per drawing no. 2002/PFB/0487. This includes trenching for jointing pit, backfilling and ramming of the pit after placing the joint closure and cable loop in the chamber without causing any damage to the same and consolidation of soil as well as disposal of excess soil.	No.	4455/-
1 C	Top plate of joint pit	Supply, Transportation ad fixing of top plates. Whether the top plates are missing or damaged. The top plate should be as per drawings no. RCIL/ER/DRG-02/06.	No.	630/-
1D	RCC Chambers	Cost of RCC Chamber (including 400 mm height sand) for reimbursement against the additional joint chambers used during bimonthly billing period for OFC cut due to NHAI/RLY (Over & above 02 numbers)	No.	3315/-
2	FRP/RCC Route Marker	Supply and fixing of cable route markers as per drawing		
2 A	RCC Route Marker	Supply, Transportation and fixing of RCC cable route markers as per drawing no. RCIL/ER/DRG-01/06. Markers shall normally be provided at a distance of every 100 mtrs on the cable route, at places/comers where the route of the cable changes, on either side of culverts, bridges, L.C. Gates,	No.	195/-

		road cutting etc. These shall be engraved		
		with letters "RCIL OFC" and suitably		
		painted. The markers shall be painted with		
		Green when placed near joint chambers and		
		should be painted with orange at all other		
		places. The engraved portion "RCIL OFC"		
	<u> </u>	should be painted with white.		
		Supply, Transportation and fixing of FRP		
		cable route markers as per drawing no. RCIL/ER/DRG-01/06. Markers shall		
		normally be provided at a distance of every		
		100 mtrs on the cable route, at places/comers		
		where the route of the cable changes, on		
	FRP Route	either side of culverts, bridges, L.C. Gates,	No.	
2B	Marker	road cutting etc. These shall be engraved	NO.	225/-
	Warter	with letters "RCIL OFC" and suitably		
		painted. The markers shall be painted with		
		Green when placed near joint chambers and		
		should be painted with orange at all other		
		places. The engraved portion "RCIL OFC"		
		should be painted with white.		
3A	Concreting	Concreting for protection of OFC cable		
		Concreting to be provided:		
		In rocky areas where trench is of low depth		
		and OFC is to be protected.		
		1) At bridges / culverts to protect		
		OFC on approaches.		
		2) Wherever necessary, as directed	Cu. m	7000/-
		by RCIL Engr.		
		The proportion of cement, metal and sand is		
		1:3-6 (1-cement, 3-stone 3/8", 6-sand) with		
		curing and ensuring proper setting.		
	HTAL A	Thickness should be 0.15 mtrs. and width is	dia	I feet
T\C	HELGUA	0.3 mtrs. in situations 1 & 2 above.	ura	LUL
	73.300	Supply & laying of 50 mm dia GI Pipe	212.9	
	G.I. (Dime on			
4A		, ,	Mtr.	430/-
	RCC Bridges)	_		
	Trenching			
5A	(1Mtr with	includes provision of 9 bricks / mtr & Fixing	Mtr.	165/-
	bricks)	of route marker of RCC/FRP embossed		
	· ·	(70 177 17 1 1 1 1 1 0		
		"RailTel" and painted with Orange, as per		
	·	1	Mtr.	

		Trenching to a depth of 1.2 mtr and		
		appropriate width for pipe/duct/cable and	Mtr.	
5B		backfilling after laying OFC as per	Mitr.	
		specification.		
5 D	Trenching	Trenching in normal soil to a depth of 1.2		
5 B	(1.2Mtr	metre and 300 mm wise and backfilling after	Mtr.	50/-
(1)	depth)	laying of OFC / pipe /duct as per		
		specification.		
		Trenching in hard soil to a depth of 1.2 metre		
5 B		and 300 mm wide and backfilling after	Mtr.	75/-
(2)		laying of OFC / pipe / duct as per		737
		specification.		
		Cutting hard rock for 0.3 mtr depth of		
		trench		
		Cutting hard rock of the following thickness		
<b>5</b> C	Hard Rock	of strata 0.3 m depth (0.3 m whdth) and		
		concreting thereafter as per direction of site	Mtr.	240/-
		In charge (cost of concreting will be as per		
		SOR item No. 3 A)		
	C 1 C'11'	Providing dry sand in FRP/RCC joint	No.	. بدر ر
6	Sand filling	chambers up to 400mm height		665/-
	Loving of	Laying of OFC/ QUAD Cable in trench and		
7A	Laying of	through HDPE/GI/RCC pipes where ever	Mtr.	11/-
	OFC	necessary.		
7D	Laying of	Laying of HDPE duct in trenches. Supply	Mtr.	11/
7B	HDPE duct	and pulling of nylon rope through it.		11/-
		Supply & Provision of OFC Joint closure		
O	OFC Joint	including Splicing (24/48 Fibre). The joint	No.	<b>5</b> 0.40 /
8	Enclosure	Enclosures shall be TVSE, Raychem model		7840/-
		FOSC, ROXTEC, 3-M, Commscope Make		
		Rectification & re-splicing of existing mid		
8 A		section OFC joints. This includes supply and	No.	5475/-
J A		provision of joint repair kit & sleeves		J4/J/-
	HTAL !	Cost of Joint closure (TVSE, Raychem model	dia	160
	111111111111111111111111111111111111111	FOSC, ROXTEC, 3-M, Commscope Make) for reimbursement against the additional joint	Ne	
8B	90,000,00	closures used during bi-monthly billing period for	No.	2360/-
	IN MEN	OFC cut due to NHAI/RLY (Over & above 02	10)	
	2 2 27	numbers)		
		Repair of existing OFC Terminal Joint		
		(24/48 Fibre). This includes Splicing of all	No.	
9		the 24/48 Fibres./dropping of fibre/pigtail	NO.	
	Repair of	as required.		
	Terminal	Repair of existing OFC Terminal Joint	Ne	
9 A	OFC Joint.	-	No.	3295/-
	-	(24/48 Fibre)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
9 B		Splicing / dropping of each fibre / pigtail	No.	91/-
		from the terminal joint mentioned above.		
		Horizontal Drilling at a approximately		
10	Horizontal	depth of 1.65/1.2 m below the formation		
	Drilling	level of the earth including insertion of		
		DWC pipes along with couplings etc.		

10 A		In case of small stretches (less than 100 m)	Mtr.	680/-
10 B		In case of long stretches (more than 100 m)	Mtr.	455/-
11	DWC Pipe	Supply of DWC pipe 78/63 mm OD/ID as per IS 14930 Part II in 30 mtrs lengthwith with 2 snap fit couplers for jointing Each 30 mt coil length.	Mtr.	200/-
12	Vehicle for Adjoining section	Additional transport charges for attending failures in adjoining section in emergency	Km.	11/-
13	Rectification of high loss/break of fiber in existing joint enclosure.	Excavation of trench or opening /finding the existing joint pit appro. 100 mtr as a preparation for testing/rectification of fiber and its reinstatement by backfilling sand and ramming of excavated soil etc. This includes the rectification of high loss/ break of fiber	No.	5495/-
14	Transport- ation of Cable / HDPE Duct	Transportation of OFC cable/HDPE duct drum		
14 A		Transportation of OFC cable (drum – 3 km) / HDPE Duct (coil – 1 km) from RailTel's stores other that he nominated stores (to and fro differential distance form nominated stores will be considered).	Drum Km	11/-
15	Pulling of aerial fiber	Pulling of aerial OFC with 4 mm G.I. wire support clamped at every 1 Mtrs approx	RM	
15 A		Drawal of unarmoured over head OFC (6/8/12/24 fibre) with sufficient ground clearance (to avoid interruption of cable by over consignment truck) with suitable binding arrangement (messenger). This included supply of 6/8/12/24 fibre over head cable and other consumable required to draw the cable	Mtr.	40/-
15 B	iilTel (	Supply and provisioning of over head OFC mid section / terminal joint (6/8/12/24 Fibre) including splicing of all the fibers	No.	2725/-
16	Cable route tracing	OFC route tracing & submission of corrected cable route plan (soft copy in CD and two hard copies). Cable Route plan should contain LC gates, culverts/bridges, joint chambers, stations, offset, depth of cable at every 100 mtrs	Km.	650/-
17	Track/Road/ Platform crossing	Trenching to a depth of 1mtr below rail/Road/Platform level, placing of G.I.Pipe( as per IS 1239 pt.I & pt.ii), 50 mm dia.(inside) in the trench made, backfilling and ramming	Mtr.	495/-
18	Protection work at bridge/ culvert	Supply and provision of Channels, clamps, fixtures, Troughts, nuts and bolts etc.		

		Supply & Fixing of M.S. Channel, (C-		
		section, 100 mm x 50 mm x 6 mm) as per drawing No. RCIL/ER/DRG-08 A & B/06		
18 A		Channel (bracket) length – 1.5 metre	No.	870/-
18 B		Channel (bracket) length – 1.2 metre	No.	695/-
18 C		Channel (bracket) length – 0.9 metre	No.	525/-
		Supply & Fixing of bracket made of M.S. flat		
	Protection	(75 mm x 12 mm) as per drawing No.		
10.7	work at bridge	RCIL/ER/DRG-08 A & B/06		
18 D	/ Culvert	Bracket length – 1.5 metre	No.	695/-
18 E	/ Curvert	Bracket length – 1.2 metre	No.	555/-
18 F		Bracket length – 0.9 metre	No.	415/-
		Supply & Fixing of "Z" clamp, of M.S. flat (300 mm x 38 mm x 12 mm) including		
		supply and provision of Hexagonal Nuts &		
18 G		Bolts 10 mm x 38 mm with spring washer,	No.	135/-
		flat washer, check nut for fixing of M.S.		
		Channel on girder bridges as per drawing		
		No. RCIL/ER/DRG-08 A & B/06.		
		Supply & Fixing of (perforated) G. I. Pipe		
		(as per IS 1239 Pt. I & Pt. II) 50 mm dia		
18 H		(inside) for entry of cables on bridges /	Mtr.	430/-
		culvlerts as per drawing No. RCIL/ER/DRG-		1.5 07
		08 A & B/06. Perforation of pipes to be done		
		as per drawing No. RCIL/ER/DRG/11/07.		
		Supply & Fising of Clamp, made of M.S. flat		
		(350 mm x 38 mm x 6 mm) including supply		
		and provision of Hexagonal Nuts & Bolts 8 mm x 38 mm with spring washer, flat		
18 I		washer, check nut for fixing of G.I. Pipe (50	No.	65/-
		mm dia) and for binding trough & trough		
		cover o M.S. Channel as per drawing No.		
		RCIL/ER/DRG/11/07.		
	Protection	Supply & Fixing of G.I. Trough, (C-section,		
R	work at bridge	75 mm x 50 mm x 50 mm) 1.2 mm thick on	dia	Ltd.
18 J	/ Culvert	M.S. Channel or as per requirement	Mtr.	180/-
	(A Min	depending on site condition as per drawing	100	
	1177.7.7.7.7	No. RCIL/ER/DRG/10/06.		
		Supply & Fixing of G.I. Trough cover, (C-		
		section, 78 mm x 25 mm) 1.2 mm thick on		
18 K		M.S. Channel or as per requirement	Mtr.	130/-
		depending on site condition as per drawing		
		No. RCIL/ER/DRG/10/06.		
		Supply and provision of split G.I. Pipe 75		
		mm x 300 mm with clamps 250 mm x 38		
18 L		mm x 6 mm and Hexagonal Nuts & Bolts 10	No.	405/-
		mm x 38 mm with spring washer, flat		TU3/-
		washer, check nut for fixing the Clamps (as		
		replacement of G.I. Pipe couopler)	<u> </u>	

	Doctification			
19	Rectification of criss crossing of fibers in a joint enclosure	Rectification of criss-cross of fibers in a joint enclosure (rate per joint)	No.	5475/-
20	Petrol man	Rate of petrol man per day	No.	370/-
21	Splicing	Splicing and termination of 48 Fiber OFC (Splice enclosure supplied by RailTel)	No.	3630/-
22	Dropping	Rate for dropping/splice of through fiber for each dropping/splicing	No.	91/-
23	Aerial fiber	Splicing rate for 6/12/24 aerial fiber	No.	91/-
24	Drawing of Armored 12/24F OFC	Drawing of Armored 12/24F OFC on the poles using suitable fixtures (as per the type of poles). After completion of drawing of OFC, all the 12/24 fibers should be tested. If any break/high loss even observed, the same shall be rectified by the agency without extra cost	Mtr.	40/-
25	Releasing of O/H cable	Releasing of O/H cable from electrical poles and depositing of material in store.	Mtr.	9/-
26	Pulling of OFC	Pulling of OFC through already laid HDPE duct /GI pipe /DWC pipe	Mtr.	9/-
27	Painting of outdoor assets	All outdoor assets like prefeb /building, channels and other protection equipment on steel girder bridges etc to be painted as per IR telecom manual.	Sq. Mtr.	55/-
28*	Splicing and termination of 48 fibre OFC	Splicing and termination of 48 fibre OFC	No.	3630/-
Re	ilTel (	Laying of cable as below, after cutting floor/pavement/wall and making holes	dia	Ltd.
		incl. embedding the cable at an average depth as below and mending good the	se)	
29*	Laying through Floor/Payme nt/Wall	damages to original finish incl. removing the rubbish.  (29 A) From 2.5 sq mm to 35 sq mm at an average depth of 75 mm in floor/pavement/wall etc.  (29 B) Above 35 sqmm to 95 sqmm at an	Mtr.	115/-
		average depth of 100 mn in floor/pavement/wall etc.  (29 C) Above 95 sqmm at an average depth of 100 mm in floor/pavement/wall etc.		165/-
30*	Laying and clamping of	Laying and clamping of OFC inside prefab/Building/equipment room	Mtr.	91/-

	OFC/electric al cable inside prefab/ Building/Equ ipment room	including supply and fixing of PVC conduit ad U/D clamps		
31*	Supply and installation of 15/22/30 Amp (MCB) Board	Supply and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required (Single pole and neutral)	No.	400/-
32*	Cleaning of OFC room/Hut	Cleaning / clearing of water logged area, bushes near the ambience of OFC/equipment room	Per person per day	370/-
33*	Clamping of HDPE duct and OFC cable	Clamping of HDPE duct and 6 Quad cable on the wall at 1 m interval separately including supply of steel clamps, saddles, cement and other materials as required for holding the table and duct properly.	Mtr.	91/-
34*	Treatment of roof leakage	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm, b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately). For the purpose of measurement the entire treated surface will be measured.	Per sq. mtr	325/-

**Signature of the Tenderer with Stamp** 

# **Chapter-12**

#### **Details of Nominated stores**

Sec. No.	Maintenance Section HQ	Primary Store	Secondary Store
1	Cuttack	Bhubaneswar	Kharagpur
2	Bhubaneswar	Bhubaneswar	Kharagpur
3	Rangiya	New Bongaigaon	Guwahati
4	Guwahati	Guwahati	New Bongaigaon
5	Lumding	Guwahati	Jorhat
6	Jorhat	Jorhat	Tinsukia
7	Tikiri	Rayagada	Koraput



RailTel Corporation of India Ltd.
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# SECTION-II Chapter-13

# INSTRUCTIONS TO TENDERERS AND GENERAL CONDITIONS OF CONTRACT (GCC)

#### **INDEX**

PARA	SUBJECT
1.	GENERAL INSTRUCTIONS
2.	INTERPRETATIONS
3.	LOCAL CONDITIONS
4.	COMPLIANCE TO TENDER CONDITIONS, SPECIFICATIONS & DRAWINGS
5.	EARNEST MONEY
6.	SUBMISSION OF OFFERS
7.	UNIT PRICES
8.	VALIDITY OF OFFER
9.	RATES DURING NEGOTIATION
10.	OPENING OF TENDER
11.	NON-TRANSFERABILITY AND NON-REFUNDABILITY
12.	ERRORS, OMISSIONS & DISCREPANCIES
13.	WRONG INFORMATION BY TENDERER
14.	QUALIFYING CRITERIA
15.	SYSTEM PERFORMANCE GUARANTEE
16.	EVALUATION OF OFFER
17.	AGREEMENT
18.	TENDERER'S ADDRESS
19.	SETTLEMENT OF DISPUTES/ ARBITRATION

#### INSTRUCTIONS TO TENDERERS AND CONDITIONS OF TENDERING

#### 1. GENERAL INSTRUCTIONS

- 1.1 Tender is invited by the Executive Director/Eastern Region on behalf of M/s RailTel Corporation of India Limited, Kolkata for the work as defined in preamble para 1.
- 1.2 The Preamble, Instructions to Tenderers and Conditions of Tendering, Scope of work, Description of work & SORs, all Annexure & Forms and Corrigendum & Addendum etc, if any, shall, hereafter, be collectively referred to as the "Tender Document".

#### 2. INTERPRETATIONS

The following terms wherever occurring in the tender Document and wherever used throughout the execution of the contracts, shall, unless excluded by or repugnant to the context, have the meaning attributed thereto as follows:

"CONTRACT" Means the Contract resulting from the acceptance by the Executive Director of this Tender whether in whole or in part.

"CONTRACTOR" Means the successful Tenderer, i.e. the Tenderer whose Tender has been accepted either in whole or in part.

"CONTRACTOR'S REPRESENTATIVE" Shall mean a person in supervisory capacity who shall be so declared by the Contractor and who shall be authorized for any work specified in the Contracts. He shall be responsible for proper execution of contracts.

"MONTH" Means any consecutive period of thirty days.

"MATERIALS" Means all equipments, tools, special aids, plants and testing equipments and appliances for execution of contract.

"PoP" Means point of presence i.e. A place or premises where any telecom equipment is placed.

**"RailTel"** Means M/s. RailTel Corporation of India Limited, Office of the Executive Dirrector, Eastern Region, 3<sup>rd</sup> & 16<sup>th</sup> FLOOR, 33A, CHATTERJEE INTERNATIONAL CENTRE, J. L. NEHRU ROAD, KOLKATA – 700 071 (complete address of the Executive Director to be furnished)

"Section" Means the areas to be taken up by the Contractor for execution of maintenance work and other maintenance related work given in the tender document.

**ENGINEER** shall mean a RailTel employee who is responsible for maintence carried out in particular section by maintenance team.

**ENGINEER-IN-CHARGE (EIC) shall** mean a Senior Manager of RailTel, responsible for ensuring that all field works covered by the contract are carried out in accordance with approved designs, drawings & specifications and conditions of contract as agreed to.

"BLOCK SECTION" Means the distance along the railway track between two consecutive Railway stations.

"TENDERER" 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.

"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 and Annexure hereto 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 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 Engineer during the progress of the contracted work.

"WRITING" Includes all matters written, typewritten or printed either in whole or in part.

#### 3. LOCAL CONDITIONS

- 3.1 It will be imperative on each tenderer to fully acquaint himself with all the local conditions and factors which would have any effect on the performance of the contract before quoting .The Executive Director shall not entertain any request for clarifications from the tenderer regarding such local conditions. No request for the change of price, or time schedule of delivery of stores shall be entertained after the offer is accepted by the Executive Director on account of any local condition or factor.
- 3.2 The intending tenderer is advised to study the tender document carefully before quoting. Any submission of a bid by the tenderer shall be deemed to have been done after a careful study and examination of these documents with full understanding of the implication thereof. These conditions and specifications shall be deemed to have been accepted unless otherwise, specifically commented upon by the Tenderer in his quotation. Failure to adhere to anyone or all these instructions may render his offer liable to be ignored without any reference.

3.3 Should a tenderer find discrepancies in, or omission from the drawings or any of the Tender document or he has any doubt to their meaning, he should at once notify the RailTel who may send a written clarification to all tenderers.

# 4. COMPLIANCE TO TENDER CONDITIONS, SPECIFICATIONS & DRAWINGS

- 4.1 The tenderer shall indicate paragraph by paragraph for each section of the tender document that either his tender complies in every respect with the requirements of each clause and sub clause or if not, precisely how they differ from the requirements of the tender. In later case, the Tenderer shall enclose a separate statement indicating only the deviations for any clause or sub-clause of Conditions of Contract, Instructions to Tenderers and Conditions of Tendering, Technical Specifications, Preamble etc. which he proposes with justifications for deviations proposed. The Executive Director reserves the right to accept or reject these deviations and his decision thereon shall be final.
- 4.2 The Services offered shall be in accordance with the drawings and specifications & conditions of the contract.
- 4.3 Contractor should give details of contract carried out giving details of the name of the contract, date of award, length of the section, value of the contract, the original execution period and the actual execution time taken. This will be supported by a user certificate.
- 4.4 The tenderer should provide information about the compliance of various clauses / sub clauses / paragraphs ( when tenderer plans to give separate compliance of each paragraph or sub clause) of tender document

#### 5. EARNEST MONEY

- 5.1 The tenderer shall furnish an amount as given in Preamble as earnest money in favour of RailTel Corporation of India Limited for each tendered section that he wants to quote for.
- 5.2 The validity of offer will be 60 days from the date of opening of tender 'as given in Preamble. It being understood that the tender documents have been sold/issued to the tenderer and the tenderer has been permitted to tender in consideration of the stipulation on his part that after submitting his tender he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to RailTel. If the tenderer fails to observe or comply with the foregoing stipulation, the aforesaid amount deposited as Earnest Money shall be liable to be forfeited by the RailTel.

- 5.3 The Earnest Money receipt shall be incorporated in the original copy of the tender document. Other copies of the offer shall contain true copies of Earnest Money receipt. The Earnest Money should be furnished in the form of an Account Payee Demand Draft in favour of M/s RailTel Corporation of India Limited payable at Kolkata from SBI or a Nationalized Bank or a schedule Commercial Bank operating in India.
- 5.4 The earnest money may be forfeited under the following circumstances.
- 5.4.1 If tenderer withdraws its tender during the period of tender validity specified in Preamble
- 5.4.2 In case of successful tenderer, if the tenderer fails to sign the contract in accordance with relevant para of Preamble and to furnish Security Deposit in accordance with relevant clause of preamble. The earnest money of unsuccessful tenderer will save as herein before provided, be returned within reasonable time to the unsuccessful tenderer but the RailTel shall not be responsible for any loss or depreciation that may happen to the security for the due performance of the above stipulation to keep offer open for the period specified in the tender documents or to the Earnest Moneywhile in their possession nor be liable to pay interest thereon.
- 5.5 If the tender is accepted, the amount of Earnest Money will be held as security deposit as per relevant para of Preamble of tender document for due and faithful fulfillment of contract.
- 5.6 The tender not accompanied by Earnest Money as mentioned in clause 5.3 above or if any of the documents submitted by the tenderers is proved to be fraudulent, the offer will be summarily rejected & EMD will be forfeited.
- 5.7 The Security Deposit shall be released as per relevant clause of preamble
- 5.8 For NSIC registered firm
- 5.8.1 For Small Scale Units registered with NSIC under single point registration scheme and participating in this tender, following exemptions shall be available

ration of India Ltd.

- (i) They shall be exempted from cost of tender documents. However, postage charges of Rs. 590/- would have to be paid by them, in case they need tender document by post.
- (ii) They shall also be exempted from depositing Earnest money.

These exemptions shall be applicable provided units are registered with NSIC for tendered item and registration is current and valid. Firms calming these exemptions are required to submit along with their offer, a copy of their current and valid NSIC

registration certificate for the tendered item/items, otherwise their offer would not be considered.

#### 6. SUBMISSION OF OFFERS

- 6.1 The offer in the prescribed forms should be submitted before the time and date fixed for the receipt of the offers. Offers received after the stipulated time and date will be summarily rejected.
- 6.2 In case the date of opening happens to be a holiday, the tender will be received and opened at the same time on the next working day.
- 6.3 The offer shall be either type written or written neatly in indelible ink in English. Eachpage of the offer must be numbered consecutively. A reference to total number of pages comprising the offer must be made at the top right hand corner of the toppage. The supporting documents should be submitted either in original or duly signed by the authorized signatory of the tenderer. The original documents shall be produced for verification when called for.
- 6.4 All copies of the tender papers shall be signed in ink by the tenderer, on each page including closing page in token of his having studied the tender papers carefully.

#### 6.5 RATES IN FIGURES & WORDS:

- i) All prices having a bearing on the quoted price shall be written both in figures and in words in the prescribed offer form. In case of difference in words and figures the amount written in words will be taken into consideration.
- ii) In the event of any discrepancy between unit rate and total cost, the value shown in unit rate will be taken for evaluation purpose.
- iii) In case the schedule of requirement quoted by tenderer is incomplete with reference to tender document, the offer is liable to be rejected.

#### 6.6 ATTESTATION OF ALTERATION:

No scribbling is permissible in the tender documents. Tender containing erasures and alterations in the tender documents are liable to be rejected. Any correction made by the tenderer/tenderers in his/theirentries must be signed (not initialed) by him/them.

6.7 Submission of tender BID will be done as per relevant para of Preamble.

#### 7. UNIT PRICES:

Unit prices should be quoted in Indian Rupees by the tenderer after taking all the relevant factors into consideration and these should be Firm and all excluding of GST without any variation clauses. The prices shall be quoted in rupees for the units under metric system.

#### 8. VALIDITY OF OFFER

The tenderer should keep the offers valid for the period as mentioned in "Preamble".

#### 9. RATES DURING NEGOTIATION

The tenderer/s shall not increase his/their quoted rates in case the RailTel Administration negotiates for reduction of rates. Such negotiations shall not amount to cancellation or withdrawal of the original offer and the rates originally quoted will be binding on the tenderer/s.

#### 10. OPENING OF TENDER:

Tenderer's Bid will be opened online at the time & date of opening of the tender given in relevant para of preamble in presence of such Tenderers/Authorized Representatives who choose to be present.

#### 11. NON-TRANSFERABILITY AND NON-REFUNDABILITY

The tender documents are not transferable. The cost of tender paper is not refundable.

#### 12. ERRORS, OMISSIONS & DISCREPANCIES

The Contractor(s) shall not take any advantage of any mis-interpretation of the conditions due to typing or any other error and if in doubt, shall bring it to the notice of the Engineer Incharge without delay. In case of any contradiction only the printed rules, and books should be followed and no claim for the mis-interpretation shall be entertained.

#### 13. WRONG INFORMATION BY TENDERER

If the tenderer/s deliberately gives/give wrong information in his/their tender which creates/create circumstances for the acceptance of his/their tender forfeiting his EMD. Also, if the wrong information leads to release of any wrong payment, the contract will be cancelled and Security deposit will be forfeited.

# 14. QUALIFYING CRITERIA

For qualifying in tenderers bid shall be required to meet the eligibility requirements as given in relevant para of preamble.

#### 15. SYSTEM PERFORMANCE GUARANTEE

The Contractor shall give unqualified and unconditional guarantee that the maintenance team depoyed by him will achievedesired objective, If he needs to depute any additional Man, Machine & Material to achive desired objective, no extra payment shall be made to the contractor. Amount as defined in the preamble will be held towards the same.

#### 16. EVALUATION OF OFFER

The tenders received will be evaluated by the Authorized representative of RailTel as per eligibility & evaluation criteria given in the tender document.

However, the RailTel shall not be bound to accept the lowest or any tender or to assign any reason for non-acceptance or rejection of a tender. The purchaser reserves the right to accept any tender in respect of the whole or any portion of the work specified in the tender document.

#### 17. AGREEMENT

The successful tenderer/s shall be required to sign an agreement with the representative of RailTel for carrying out the work according to the tender documents within 15 days as indicated in relevant para of preamble

#### 18. TENDERER'S ADDRESS

Tenderer shall state in the tender his postal address fully and clearly. Any \*communication sent to the tenderers by post at his said address shall be deemed to have reached the tenderer duly & timely, notwithstanding the fact that the communication could not reach the tenderer at all or in time for whatever reason. Important documents shall be sent by Registered Post and will be dealt as per relevant para of preamble

#### 19. SETTLEMENT OF DISPUTES/ ARBITRATION

Any dispute or difference whatsoever arising between the parties out of or relating to the construction, meaning, scope of work, operation, rates, penalties 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 both the parties. The vanue of such arbitration or proceedings thereof shall be at New Delhi.

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

The arbitral Tribunal shall consist of the sole arbitrator appointed by CMD/RailTel Corporation of India Limited, if the value of claim is up to Rs. 10 lakh. If the value of claim or amount under dispute is more than 10 lakhs, the matter shall be referred to the adjudication of arbitral council. CMD/RailTel Corporation of India Limited 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 as re reasonable able to do so.

# **Chapter-14**

## SPECIAL CONDITIONS OF CONTRACT

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RailTel Corporation of India Ltd.
(A Protecto Category | Linterprise)

#### SPECIAL CONDITIONS OF CONTRACT

#### 1. TENDER DOCUMENTS

1.1 The services and quality required, bidding procedure and contract terms and conditions are prescribed in the tender documents. The set of tender documents issued for the purpose of bidding includes following together with Corrigendum and Addendum, if any.

Section-I: I) Preamble.

- II) Checklist & tender notice
- Iii) Introduction, scope of work

Section-II: I) Instructions to tenderers and conditions of tendering.

- II) Special conditions of contract
- III) Forms, proformas & Drawing of Tender
- 1.2 If the Tender submitted by a Tenderer is accepted and the contract awarded to the Tenderer the various works/Contracts coming under the purview of the contract shall be governed by tender documents.
- 1.3 Any special conditions stated by the Tenderer in the covering letter submitted alongwith the tender shall be deemed to be a part of the Contract to such extent only as have been explicitly accepted by the RailTel.

#### 2. AGREEMENT

The successful Tenderer shall, within 15 days after having been called upon by notice to do so, be bound to execute an agreement based on accepted rates, terms and conditions, in such form as the RailTel may prescribe, and lodge the same with the RailTel together with the conditions of contract, specifications and Schedule of prices referred to therein duly completed. The form for agreement is referred as Form no. 1.

#### 3. CONTRACT PERFORMANCE GUARANTEE (Security Deposit)

- 3.1 On receipt of the Letter of Acceptance of Tender from the RailTel, the successful Tenderer shall deposit an amount to RailTel as defined as per relevant para of preamble rounded off the nearest whole number towards payment of Security Deposit for due fulfillment of the contract.
- 3.2 Details as to how SD will be deposited and released are given in the preamble.

#### 4. CONTRACTOR'S OFFICE

Tenderer shall state in the tender his postal address fully and clearly. Any communication sent to the tenderers by post at his said address shall be

deemed to have reached the tenderer duly & timely, notwithstanding the fact that the communication could notreach the tenderer at all or in time for whatever reason. Important documents shall be sent by Registered Post and will be dealt as per relevant para of preamble

#### 5. PROGRAMME OF WORK

- 5.1 The Contractor shall have necessary resources to execute the work/contract so that the entire work is completed within three year period as mentioned in the relevant para of preamble from the date of issue of Letter of Acceptance of the tender.
- 5.2 Contractor has to commence work within 21 days from the date of issue of Letter of acceptance.
- 5.3 The Contractorshall be held responsible for the execution of the work/contracts according to the various clauses of the Technical specifications, instructions/drawings etc as per tender conditions. Failure to comply with any of these will be dealt with as per provision laid down in Conditions of Tendering.
- 5.4 The contractor will program his work/contract in such a manner so as not to interfere in the working telecom circuits and movement of trains.

#### 6. COMPETENT SUPERVISORS

The CONTRACTOR shall depute experienced / competent representative(s) at site during the execution of any job. Any instructions given to such representative(s) shall be construed as having been given to the CONTRACTOR

#### 7. TEST & MEASURING INSTRUMENTS AND TOOLS ETC.

The CONTRACTOR shall be totally responsible for the calibration & functionality of test equipment to be used at site as per laid down procedure in tender document.

#### 8. STORES TO BE SUPPLIED BY CONTRACTOR

All materials required for the execution of the contract shall be arranged and supplied by the Contractor except supply of Duct and OFC so as to realize the end objective.

#### 9. **SPARES**

The tenderer shall keep spare man, machine and material to achieve the end objective of work. This will be on the own cost of contractor.

#### 10. OUALITY ASSURANCE

Quality of service to be performed should be to entire satisfaction of RailTel, in case the services are not found up to the mark or failure to execute the work as per terms & conditions of the contract, RailTel will get the work done from other sources at contractor's cost.

#### 11. INSPECTION OF Man, Machine & Work

The Executive Director or his representative may inspect and test the various portions of the work / contract at all stages and shall have full power to reject all or any portion of the work that he may consider to be defective or inferior in quality of materials, machine & workmanship or design in comparison to what is called for in the specification. Periodicity will be as defined in O&M manual.

#### 12. SUBLETTING AND ASSIGNMENT

The contractor shall not sub-contract whole or any part of the work.

#### 13. EXECUTION OF WORK

All the works/Contract shall be executed in strict conformity to the provisions of the contract document and with such explanatory detailed drawings, specifications and instructions as may be approved from time to time based on detailed design and engineering carried out by contractor in line with requirements as per contract document. The contractor shall be responsible for ensuring that the work throughout are executed in the most substantial, proper and workmanlike manner with the quality of material and workmanship in strict accordance with the specifications and as per sound industrial practices and to the entire satisfaction of the RailTel.

#### 14. MAINTENANCE OF WORKS / CONTRACTS

The maintenace of section is to be done as per the laid down terms and conditions in the contract agreement to achieve the end objective of the contract

#### 15. CLEARANCE OF SITE

At the end of the work at each location the Contractor shall as a part of his Contractual obligation, leave the section completely neat and clean.

#### 16. WARRANTY

16.1 All material supplied/used and the work done by the contactor shall be

guaranteed for 24 months against the defective manufacture/workmanship, within warranty period from the date of rectification. The cost of work and material under warranty found to be defective will be recovered from the SD.

#### 17. INFRINGEMENT OF PATENTS:

- (a) The Contractor is forbidden to use any patents or registered drawings, processes or patterns in fulfilling his contract without prior consent in writing of the owner of such patents, drawings, patterns or trademarks except where these are specified by the Executive Director himself. Royalties where payable for the use of such patented processes, registered drawings or patterns shall be borne exclusively by the Contractor. The Contractor shall advise the Executive Director or its representatives of any proprietary rights that may exist on such processes, drawings or patterns which he may use of his own accord.
- (b) In the case of patents taken out by the Contractor of the drawings or patterns registered by him or of those patents, drawings or patterns for which he holds a license, the signing of the contract automatically gives the Executive Director or its representatives—the right to repair by himself for services covered by the patent or by any person or body chosen by him and to obtain from any sources he desires the component parts required by him for carrying out the repair work. In the event of infringement of any patent rights due to above action of the Executive Director, he shall be entitled to claim damages from the Contractor on the grounds of any loss of any nature which he may suffer e.g. in the case of attachment because of counterfeiting.

# 18. LABOUR LICENSE and COMPLIANCE WITH LABOUR, INDUSTRIAL & ENVIRONMENTAL LAWS

The Contractors are required to roduce license as enjoined in the Government of India ContractLabour (Regulation and Abolition) Act (1978) with latest amendments, if any. The Contractor shall at its expense, ensure due compliance with all applicable and governing Industrial, environmental and Labour Laws, Rules, Regulations and Bye-laws both of the Central and State Govt. and all other local authorities and shall keep RailTel harmless and indemnified in respect thereof. The CONTRACTOR shall ensure due compliance with the provisions of the relevant minimum Wages Act, payment of Wages, Contract Labour (Regulations & Abolition) Act, Employees Provident Fund Act and other industrial and environmental laws in force and provide any related information to RailTel as and when required.

#### 19. DEFAULTS AND DELAYS

The Contractor shall execute the work with due diligence and expedition, keeping to the proper maintenance. Should he refuse or neglect to comply

with any reasonable orders given to him in writing by the Rail Tel's engineer in connection with the work or contravene the provision of the Contract or the progress of work lags persistently behind the time schedule due to his neglect, the contract will be terminated as per the condition given in the SCC.

#### 20. LOSS SUSTAINED DUE TO DEFAULTS AND DELAYS

In the event of any loss or damages to RailTel and other parties on account of execution and/or completion of the work or any part thereof by the contractor, He may become defaulter and penalities shall be borne by Contractor itself as per various clauses defined in the tender document.

#### 21. CONTRACTOR'S LIABILITIES FOR COSTS AND DAMAGES

- 21.1 Whenever any claim or claims for payment arises out of or under the contract against the contractor, the Executive Director or its representatives shall be entitled to withhold and also have lien to retain such sum or sums in whole or in part thereof .The contractor shall be charged a penalty as defined in tender document.
- 21.2 The Maximum Liability of contractor to any Loss/Damages to RailTel including Liquidity Damages and Performance Bond shall be limited to 100% of Value of contract.

#### 22. UNIT PRICES

- 22.1 The prices quoted by the Tenderer shall include the prices of Man, Machine & materials including allother charges. The prices would also include charges towards completing all necessary formalities such as submission of forwarding notes, banker'scharges for Bank guarantee, Indemnity Bonds inclusive of cost of Stamp etc. as applicable and also the charges, if any, levied by the RailTel.
- 22.2 **TAXES, DUTIES, OCTROI, LEVIES ETC:** The quoted prices shall be excluding GST till the completion of the contract and the CONTRACTOR shall not be eligible for any compensation on any account. Any change in GST rates shall be paid as per actual.
- 22.3 The prices quoted in the contract shall be inclusive of all other taxes i.e. Income tax, custom duty, excise duty, octroi, local levies, sales tax levied by any statutory authority, GST TDS, Labour Cess, VAT (if any) or any other tax, except GST only. The tenderer will indicate the details of taxes included in the unit price. The rate of GST applicable on the basic rates should also be mentioned.

#### 23. TERMS OF PAYMENT

- 23.1 All bills shall be submitted to the authority concerned in Regional Office of RailTel.
- 23.2 Even though the maintenance charges are worked out on a monthly basis. The CONTRACTOR shall be paid once in two months the maintenance charges for two months period subject to submission of permanent restoration certificate (proforma -7) of fault occurred during the particular period jointly signed by RAILTEL & contractor representatives and on submission of test results of power, OTDR readings etc as required by the terms of the contract to the satisfaction of the Engineer.
- 23.3 Submission of bills within 15 days or by next week for previously completed two months is mandatory failing of which a penalty shall be charged as defined in tender document. Deduction from monthly maintenance charges if the Cumulative repair time of the faults in each billing period of consecutive two months exceeds by 2 hours or part thereof.
- 23.4 The amount payable against the maintenance charges is dependent upon the Cumulative Repair Time taken by the Contractor for the restoration of all OFC link cut/faults occurred during each billing period of consecutive two months. Cumulative repair time does not include the down time taken for planned works like diversion of OFC, retermination etc
- 23.5 ON ACCOUNT PAYMENT FOR Submission of documents: Along with the bill for payments for the respective sections, the documents as defined in tender document must be submitted duly certified by the RailTel's representative.

#### 23.6 GST related clauses:

- a. The price quoted in the offer should be firm, fixed indicating the breakup and inclusive of all taxes & duties like import, custom, Anti Dumping, except GST (CGST, SGST, IGST, UTGST etc). The offer should be inclusive of packing, forwarding, freight upto destination, insurance charges
- b. Bidder shall issue valid tax invoice to RailTel for availing proper credit of CGST/SGST/IGST/UTGST incase of award of contract. GST will not be reimbursed in the absence of valid tax invoice.
- c. 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.
- d. 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.
- e. 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.
- f. Tenderer shall quote basic rates, but there shall be break up all type of applicable taxes such as SGST/CGST/IGST/UT GST along with respective HSN/SAC Code under GST Law (including tax under reverse charges payable by the recipient).

- g. 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.
- h. In regards to works contract, the tenderer should have registration no. for GST in respective state where work is to be executed and shall furnish GST registration certificate along with Tender.
- i. 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 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 the 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 will 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.
- j. In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/SGST act, the Railtel shall deduct the applicable GST from his/their bills under Reverse charge Mechanism(RCM)and deposit the same to the concerned Tax Authority.

#### 24 FINAL SETTLEMENT

Security Deposit and PBG shall be returned to the contractor as per relevant paras of preamble.

#### 25. TAXES

- 25.1 The Contractor and all personnel employed by him shall pay such taxes like Income Tax, Labour Cess etc as are payable under statutory laws of India and the RailTel WILL NOT ACCEPT any liability for the same.
- 25.2 Deduction of Income Tax at source, Labour Cess, GST as per provisions of Finance Act and Income Tax in force shall be made from the Contractor/Sub-Contractor and the amount so deducted maybe credited to the Central Government.
- 25.3 Wherever the law makes it statutory for the Executive Director or its representatives to deduct any amount towards Sales Tax on Works Contract, the same will be deducted and remitted to the concerned authority.

#### 26 INSURANCE OF MATERIALS

The Contractor shall take out and keep in force a Policyor policies of Insurance for all machine & materials including Rail Tel supply materials/equipments.

- 26.1 The Contractor should, however, insure the stores brought to HQ, site, against risks in consequence of war and invasion, as required under the Emergency Risk (Goods) Insurance Act enforce from time to time.
- 26.2 It may be noted that the beneficiary of the insurance policy should be RailTel or the policies shouldbepledged in favour of RailTel. The contractor shall keep the policy/policies current till the completion of the contract.
- 26.3 For the purpose of enabling the contractor to take the insurance cover in connection with this contract, the Executive Director or its representatives will advise the approximate price of all the RailTel supply materials to the

Contractor.

#### 27. FORCE MAJEURE CLAUSE

If at any time, during the continuance of this Contract, there are delays or some jobs are not performed, which are on account of any war, hostility, act of the public enemy, Civil Commotion, Sabotage, Fires, Floods, Earth quakes, explosions, strikes, epidemics, lockouts, any statute, statutory rules / regulations, order of acquisitions issued by any Government Department or Competent Authority etc. or acts of God, then such delays or non-completion of jobs will not be counted as non-performance of the contract & will also not attract attendant penalties.

#### 28. SETTLEMENT OF DISPUTE AND ARBITRATION

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

#### 29. TERMINATION OF CONTRACT OWING TO DEFAULT OF CONTRACTOR:

- 29.1 If the Contractor should:
  - (i) become bankrupt or insolvent
  - (ii) If contractor, subcontract whole or any part of the work.
  - (iii) Abandon the contract
  - (iv) Persistently disregard the instructions of the RailTel's Engineer or contravene any provision of the contract, or
  - (v) fail to provide man, machine & material and/or carry out the works as per contractual specifications,
  - (vi) Is a defaulter as per relevant clause of condition of contract?
  - (vii) promise offer or give any bribe, commission, gift or advantage either himself or through his partner, agent or servant to any officer or employee of RailTel or any person on his or on their behalf in relation to the execution of this or any other contract with the RailTel,
  - (viii) in RailTel's opinion, the cessation of work become necessary, owing to paucity of funds of the Contractor, the Contractor's apparent inability to perform, non possession of equipments and tools required for the work or defective and malfunctioning equipments, non-availability of proper/nominated instrumentation, inability to provide men and material, repeated slippages and payment of penalty thereof or for any other cause deemed reasonable.

then and in any of these said cases, the Engineer on behalf of the RailTel may serve the Contractor with a 30 days notice in writing to that effect terminate the contract.

29.2 In such case, the value of approved materials utilized at site and of certified and accepted work done to date by the Contractor as per contract agreement shall be paid for in full at the rates specified in the Contract subject to the clause of Liquidated damages contemplated herein. All such materials become the property of the RailTel. Notice in writing from the RailTel of such termination and reason thereof shall be conclusive evidence of taking over of works from the contractor. Full security deposit will be forfeited in such case of termination.

The contractor shall be debarred from participating in the tender for executing the balance work.

29.3 Contractors defaulting in one section and having their contract terminated will not be allowed to participate in RailTel's next O & M tender for a period of 3 years in any of it's regions.

# 29.4 RIGHT OF RAILTEL AFTER TERMINATION OF CONTRACT OWING TO DEFAULT OF CONTRACTOR:

In the event of any or several of the courses, referred to above, being adopted:

- (a) The Contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any Man, Machine & materials or entered into any commitments or made any advances on account of or with a view to the execution of the works or the performance of the contract and Contractor shall not be entitled to recover or be paid any sum for any works thereto not actually performed under the contract, unless or until the Engineer shall have certified the performance of such work and the value payable in respect thereof and the Contractor shall only be entitled to be paid the value so certified.
- (b) The Engineer shall be entitled to take possession of any materials, tools, implements, machinery or buildings on the works or on the property on which these are being or ought to have been executed, and to retain the employ the same in the further execution of the works or any part thereof until the completion of the works without the Contractor being entitled to any compensation for the use and employment thereof or for wear and tear or destruction thereof.
- (c) The RailTel shall not be liable to pay to the Contractor any moneys on account of the contract until the satisfactorily completion of work duly verified by Railtel representative. The Contractor shall have noclaim to any payment of compensation or otherwise how sever on account of any profit or advantage which he might have derived from execution of the work in full but he did not derive in consequence of termination of the contract.

# **Chapter-15**

# Proforma & Forms

Form-I AGREEMENT
An AGREEMENT made this day of
Year, between RailTel Corporation of India Limited, having its registered office at 6th floor, IIIrd Block, Delhi Technology Park, Shastri Park, Delhi- 110053 and regional office at RailTel Corporation of India Ltd, Eastern Region with full address, acting in the premises through Executive Director or his successor of M/s. RailTel Corporation of India Limited ,
Eastern Region (hereinafter referred to as 'RailTel') of one part and M/s
(Registered and regional office address) (hereinafter referred to as 'contractor') of the other part.
Whereas in response to a call for Tender for
Name of
as per copy of Letter of Acceptance No dated of  Tender No dated (Tender Notice date)  complete with enclosures at the accepted rates and agreed deviations from Tender  Papers as per Annexure-C hereto and at an estimated contract value of
Rs Only).
Now this agreement witnesses that in consideration of the premises and the payment to be made by the Purchaser to the Contractor provided for herein below the Contractor shall supply all equipment and materials and execute and perform all works for which the said Tender of the Contractor has been accepted strictly according to the various provisions in Annexure 'A', 'B' hereto and upon such supply, execute and performance to the satisfaction of the purchaser and the purchaser shall pay to the Contractor at the rates accepted as per the said Annexure 'A' and in terms of the provisions therein.
In the witness where of the parties have hereunto set and subscribed their respective hands and/or seals day and year respectively mentioned against their respective signatures.
Signed and delivered at by Shri by Shri

1.	Signatures Date Name in Block Capitals Address
2.	Signatures Date
	Name in Block Capitals Address
	Address
Signe	ed and delivered at for and on behalf of
_	Tel by Shri (Director / Projects or his successor) in
	resence of:-
1.	Signatures
	Date
	Name in Block Capitals
2	
2.	Signature  Date
	Name in Block Capitals
	Name in Block Capitals
	5 C C C
Anno	exure 'A : Copy of Letter of Acceptance
Anno	exure 'B' : Tender Document

The contractor within named in the presence of:

Form-II

### GUARANTEE BOND FOR PERFORMANCE GUARANTEE

(On Stamp Paper of requisite value) (To be used by approved Scheduled Banks)

1.	floor, IIIrd Block, Delhi Technology Park, Shastri Park, Delhi- 110053 and regional office at RailTel Corporation of India Ltd, Chatterjee International Centre, 3 <sup>rd</sup> Floor, 33A, Jawaharlal Nehru Road, Kolkata – 700071 (hereinafter called "the RailTel" having agreed to exempt
	(Here in after called "the said Contractor(s) from the demand, under the terms and conditions of an Agreement No. RailTel/Tender/OT/HQ/ER/2018-19/Dated
	Deployment of maintenance teams for
	preventive maintenance and fault rectification of optic fibre cable and to provide other services in different section of RailTel, Eastern Region. Name of Work/Supply of Materials] (hereinafter called "the said Agreement") of Performance Guarantee/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
2.	contained in the said Agreement.  We,
3.	restricted to an amount not exceeding Rs
4.	We,

	(Date of validity of BG). We shall be discharged fr liability under this Guarantee thereafter.	om all
5.	We,	liberty nder to of to by the ms and om our or for by the which
6.	5. This Guarantee will not be discharged due to the change in the Constitution Bank or the Contractor(s) Supplier(s).	of the
7.	7. We,	
8.	3. Notwithstanding anything contained herein,	
1.	. Our liability under the Bank guarantee shall not exceed Rs (in R	upees)
2.	2. This Bank Guarantee shall be valid upto(Date of Validity of and	of BG)
	We are liable to pay the guaranteed and or any part thereof under this Guarantee only and only if you serve upon in a written claims or dema before Date of Validity of BG)	and or
	Dated the day of Year	
	For	•••••
	(Indicate the name of the Witness:	Bank)
	1. Signature	
	Name	
	2. Signature	
	Name	

From M/s	OFFER LETTER Form-III	
To, The Executive Director, Eastern Region RailTel Corporation of India Limited 3 <sup>rd</sup> Floor, Kolkata – 700 071		
Sub:	Deployment of maintenance teams for maintenance of OFC cable network and associated equipment etc. for a period of 3 years and extendable by one year on same terms & conditions.	
Ref:	Tender Notice No.: RailTel/Tender/OT/ER/HQ/2018-19/ , dated 01.01.2019	
seven	the undersigned hereby offer to execute the agreement for the above work within days from the date of issue of letter of acceptance of the tender in strict compliance the provision detailed in the tender document attached.	
	agree that this tender shall not be restricted or withdrawn and shall remain open for tance for and during the period of 60 days from the date of opening of the tender.	
	fully understand the terms and conditions as contained in the tender document and ree that the same shall apply to Our tender and I/We shall be bound by them.	
	st money deposit @ 2% total tender value for respective tendered section drawn in r of RailTel Corporation of India Ltd., payable at Kolkata is enclosed.	
	all value of the earnest money shall be forfeited without prejudice to any other right nedies if: -	
	do not execute the contract document within 15 days after the receipt of notice by ailTel Corporation that such documents are ready.	
I/We do not commence work within 21 days from the date of issue of letter of acceptance.		
Untill a formal agreement is prepared and executed, acceptance of this offer letter shall constitute a binding contract between us subject to modification as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer.		
I encle	ose herewith the following documents in support of my credential:-	
1.	Demand draft/Pay Order No dated issued by for	

Rs.....only) as earnest money.

2. Name and Qualification of supervisor, Technician and Splicer.

#### List of the Equipments, Make, Model No. in working condition for each section of Works.

Description	Make	Model No.	Year of purchase	Invoice No. (Copy of invoice should attached)	LDC (Last Date of Calibra tion	Qty.
Vehicle (Innova/Qualis/UV)						
Portable Gen Set						
Lighting Arrangement						
Fusion Splicing Machine with 2 nos. of Cleavers						
Power Source						
Power Meter	/	/				
OTDR (min. range 200 Km.)						
OFC Cable Route Detector		M-				
Spare Battery of splicing machine with Charger	-10					
Cable Splitter	10					
Patch cord & Connectors		V.				
Duct Cutter	10	10.	7			
Road-O-meter						
Clamp type Earth Megger & AC/DC Meter	1		e d			
Communication gadget: As required (Telephone, Cell phone, E-Mail etc.)		1				
Tools/Tackels Kit	$\sim 1$	J 64	4			
Blow lamp or Hot air-gun	11	1	1			
1 Km. Dummy Fiber Spool		age per				
500 Mtr. Aerial OFC having 24/48 Fibers	ALL	1 =				
Minmum 50 Mtr. Duct						
Rexene/ Polythene & Umbrella cover etc		2 4 2 7 7				4.7
Portable Vaccume Cleaner	OF	HO	0.01	ingl	3 L[(	1.1
Alluminium Ladder						

<b>3.</b>	No. of support staff, which will be kept for maintenance:
4.	Vehicle details along with its Registration No:
Sh	ortcomings in the above, if any, will be made good and section wise full details shall
be	furnished for each section to be awarded, before award of the contract by RailTel.

Yours Sincerely,

Signature of the Tenderer Seal of the Tenderer Place: -Date: -

Witnessed by: -

1.	Signature:	2.	Signature: -
	Name:		Name: -

Tame of Work: Deployment of maintenance team for maintenance of optic fibre of etwork and upkeep of associated gears like AC, DG, Stabilizer, Change over thelter and Wi-Fi Equipments for a period of 3 years and extendable by one year ame terms & conditions.    SOR-A		KIND I EE/I EI (D)	214 0 17 E14 11 Q/2010 12/100/ 73
Tender No.: RailTel/Tender/OT/ER/HQ/2018-19/ , dated 01.01.20  Tame of Work: Deployment of maintenance team for maintenance of optic fibre cetwork and upkeep of associated gears like AC, DG, Stabilizer, Change over helter and Wi-Fi Equipments for a period of 3 years and extendable by one year ame terms & conditions.    SOR-A	A		Address:
Tame of Work: Deployment of maintenance team for maintenance of optic fibre of etwork and upkeep of associated gears like AC, DG, Stabilizer, Change over thelter and Wi-Fi Equipments for a period of 3 years and extendable by one year ame terms & conditions.    SOR-A		FOR THE SECTION	
thelter and upkeep of associated gears like AC, DG, Stabilizer, Change over thelter and Wi-Fi Equipments for a period of 3 years and extendable by one year ame terms & conditions.    SOR-A	Tend	er No.: RailTel/Tender/OT/ER/HQ/2018-1	9/ , dated 01.01.2019
Rate, at par/ % age above below the base price (Rs.) three years excluding GS [In figures & words]    Maintenance charges for OFC cable network and upkeep of associated gears like AC, DG, Stabilizer, Change over unit, Shelter and Wi-Fi Equipments given in the tender document   At Par/ Above/Below	etwork helter a	and upkeep of associated gears like AC, D and Wi-Fi Equipments for a period of 3 years ms & conditions.	G, Stabilizer, Change over unit,
Maintenance charges for OFC cable network and upkeep of associated gears like 1. AC, DG, Stabilizer, Change over unit, Shelter and Wi-Fi Equipments given in the tender document   At Par/ Above/ Below	For O	FC maintenance:	
network and upkeep of associated gears like AC, DG, Stabilizer, Change over unit, Shelter and Wi-Fi Equipments given in the tender document  (Signature and seal of the contract  (*+/-)		Description of the work	Rate, at par/ % age above / below the base price (Rs.) for three years excluding GST [In figures & words]
Ve hereby offer to do the work as defined in the scope of Tender RailTel/Tender/OT/ER/HQ/2018-19/, Dated	1.	network and upkeep of associated gears like AC, DG, Stabilizer, Change over unit, Shelter and Wi-Fi Equipments given in the	<u>Below</u>
Ve hereby offer to do the work as defined in the scope of Tender RailTel/Tender/OT/ER/HQ/2018-19/, Dated		रतदल	
Ve hereby offer to do the work as defined in the scope of Tender RailTel/Tender/OT/ER/HQ/2018-19/, Dated		(Signa	ature and seal of the contractor)
RailTel/Tender/OT/ER/HQ/2018-19/, Dated at Par%percentage in words) above / below* the rates in SOR 'A' as shown al nclusive of all taxes, Except GST. The Rate of GST on the Basic quoted rates is in figures)% (in words).  * Strike out 'above' or 'below' as desired. In case neither is struck off 'below' with the s	`endere	er's Offer:	
ssumea.	ailTel/ ] nclusive in figure	Tender/OT/ER/HQ/2018-19/	at Par or es in SOR 'A' as shown above the Basic quoted rates is%

**Signature of Contractor with seal** 

#### **Proformas**

- 1. Splice loss / dB loss Vs Km in section
- 2. OTDR measurements
- 3. Power measurements
- 4. Patrolling reports
- 5. Attendance
- 6. Material check
- 7. Failure / rectification report (Form-A & B)
- 8. Availability of Essential equipments.
- 9. Maintenance contractor monthly performance (SOR-A)
- 10. Maintenance contractor Bill certificate (SOR-B)
- 11. Joint inspection report of Air-Conditioner
- 12. Air-Conditioner Breakdown report card
- 13. Air-Conditioner maintenance report card
- 14 .Joint inspection report of D.G.Set
- 15. D. G. Set Breakdown report card
- 16. D.G. Set maintenance report card
- 17. List of periodical maintenance to be carried out for Engine, Alternator & Control panel.
- 18. Schedule of periodical maintenance of D.G. Set Engine.
- 19. Fiber summary report
- 20. Format for recording informations on running of 15 KVA, D.G.Set

# RailTel Corporation of India Ltd. (A Meninera Calegory | Linterprise)

# <u>Proforma-1 & 2 : Proforma for Splice loss/ dB loss vs KM & OTDR measurements in section:</u>

Section:	Date:
Fiber Length:	

Fiber	Km	Loss	dB/Km	OTI	OR EV	/ENT	S (Fo	or asce	ending	g orde	er inte	r stati	on wi	se)
No.		(dB)					Kms							
	I	ı	I .	Stn	1-	Stn	2-	Stn	3-	Stn	4-	Stn	5-	
				Stn 2	2	Stn	3	Stn 4	1	Stn :	5	Stn	6	
1														
2														
3				1		\ .								
4				- 1	100	1								
5					N									
6														
7														
8														
9			4	-		u								
10						- 10	M	7						
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13														
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17				B	11	to great	- 1							
18			H	A										
19														
20														
21		-0.1	000					7	6.3		15.		6.11	
22			(CO)	174	27.5			1,7	1	111	110			6
23	143										2.6			
24/48		11		- 1	415			-	10.11					

Signature of RailTel Signature of Contractor Engineer with seal PROFORMA 1 FOR MEASUREMENTS -----  $A \rightarrow B$  PROFORMA 2 FOR MEASUREMENTS -----  $B \rightarrow A$  Shall be submitted within 10 days of doing the measurements.

## **Proforma - 3 Proforma for Power Measurement:**

Section:	Date:
Fibre Length:	

Fiber	Fiber	dB Loss		Average	dB/Km	Remarks
No.	length					
		A-> B	B-> A			
1						
2						
3						
4		- 0				
5			1 1			
6						
7				~ ( ) ( )		
8			4 4			
9			11 11			
10						
11		-\	11 /			
12				. /		
13						
14						
15		1	1			
16			La local			
17		7	CC	(3)		
18						
19		RA	MI I	page		
20		111	3.1 hm 1	hee hee		
21						
22	Statement of	124-1111				manage (a)
23	1111111	COLD	orati	on o	India	Lta.
24/48						

Signature of RailTel Engineer **Signature of Contractor with seal** 

#### **Proforma-4 for Patrolling Reports**:

Section:	For the month of:
Section:	For the month of:

			Sec	tion	Pat	rolled		
Sl.	Doto	Name of	From	То	From	То	Remarks	Signature
No.	Date	Patroller	Station	Station	(Km.)	(Km.)		
			(Km.)	(Km.)				
				1				
			/	1				
		7	- 1					
						L		
			1					

Signature of RailTel Engineer **Signature of Contractor with seal** 



RailTel Corporation of India Ltd.

(A Mourage Calegory | Linterprise)

#### Proforma-5

#### **Proforma for Attendance:**

	Fi Ac	rm ldi	ı's res	Na s_	am	e:									_																	
	At	te	nd	an	ce	Sh	eet	t fo	or (	the	mo	ntł	ı of	•																		
Na	D	1	2	3	4	5	6	7	8	9	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	3	3
m	es										1 0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1
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RAILTEL

Corporation of India Ltd.

Signature of RailTel Engineer Signature of Contractor with Seal

## Proforma-6

# **Proforma for Material to be given by RailTel:**

<b>Section:</b>	Date:
<b>Section:</b>	Da

Date	Description	Material	Material	Balance on hand
		Received	Used	
		1 1		
		10 1		
		-4		
			N /	
	10	2 mc	M	
		1110	11	
		THAC	E1	
		MILI		
Ο.	JITAL CA	rnorat	an as	India Ltd.
17.0	HERCH CO	μοιαι	DOMESTICAL	ATTORICA LANGA
	(A. Windows	a Calenda	C. Fried	

Signature of RailTel Engineer

Signature of Contractor with Seal

# $\frac{Proforma-7}{Form\ No.A}$

# **Proforma for OFC Failure / Rectification Report:**

Seci	cion:	Date:
$\Box$ F	ailure/ Rectification:	
Sl.	Description	Details
1	Name of the station &/or Pole No. of the Fault	Details
1	and Optical distance from nearest RailTel	
	/Railway node.	
2	Date & Time of receiving information about	
2	the failure (Name & Designation of informer).	
3	Time of Departure of the Team from head	
3	quarter.	
4	Time of testing by OTDR to localize the fault	
5	Station from where OTDR test has been done	
6	Time of reaching to the location of fault.	
7	Time of restoration of the fault.	
'	Time of restoration of the fault.	
8	Details of reasoning for the occurrence of the	
0	fault.	
9	i) Depth of Cable at Cut Location	
9	ii) Whether in Duct or Bare laid	
	iii) Whether Brick protection in the	
	block section of cut	
10	Type of restoration	Temporary / Permanent
11	If restoration is temporary give reason for	
	temporary restoration.	
12	Reason for delay in restoration, for which	of India Ltd.
	contractor is not responsible (please give	VI MIGICIA
	detailed break up of time). Separate sheet may	Enterprise)
	be attached if required.	and the last of
13	Details of Rectification	
A	Period of block allowed	
В	Actual block period	
С	Reason for extension of block	
~.		
Sigi	· ·	gnature of Contractor representative
	at	site
Nan	na: N	ame: Contd/
rvail	nc. N	ame. Contu/

В	Fibre swapped earlier (high loss / break)	
В	Tiere strupped currier (mgm 1000)	Yes / No
	Rectify partial cut	Yes / No
C	Rectify Ant attack in existing joint closure	Yes / No
D	For permanent restoration (earlier temporary	Yes / No
	rectification was done)	
Е	Date of temporary rectification, if any	
F	Date on which the failure could be identified.	
G	Length of OFC used for restoration of	
	failure.	
	Details about ground work	
A	Length of excavation & refilling of trench.	
	Depth of trench (should be 1.2 metre), if	
	desired depth can not be achieved, give	
	details of protection provided.	
	No. of Joint closure used.	1 / 2 / Existing Joint Closure
	ils about Joint Closure at Pit – 1	6.4
	Length of OFC of interruption cable kept in	
	the joint pit $-1$	
	Length of OFC of main cable kept in the	
	joint pit – 1	
	Whether sealing of joint closure has been	Yes / No
	done properly	
	Depth of closure at pit $-1$ from ground level	
	(it should be 1.2 metre)	
	Location of Joint closure $/$ pit $-1$ (give pole	
	No. & offset from centre of nearest track)	
	Whether the cable route plan has been	
	modified and location of Joint closure has	Yes / No
	been indicated in the existing cable route	
	plan.	
	ils about Joint Closure at Pit – 2	
	Length of OFC of interruption cable kept in	
	the joint pit $-2$	

	the joint pit $-2$		
Sign	nature of Engineer.	Sig	nature of Contractor representative
Nan	ne:	Na	me:

Contd/....

	Length of OFC of main cable kept in the	
	joint pit – 2	
L	Whether sealing of joint closure has been	Yes / No
	done properly	
M	Depth of closure at pit – 2 from ground	
	level (it should be 1.2 metre)	
N	Location of Joint closure / pit - 2 (give	
	pole No. & offset from centre of nearest	
	track)	
О	Whether the cable route plan has been	
	modified and location of Joint closure has	Yes / No
	been indicated in the existing cable route	
	plan.	
15	Item used during restoration / protection	
A	RCC/FRP	
В	HDPE	
C	G.I Pipes	
D	Joint chamber	
D	Joint marker	7
Е	Sand filling in Joint Chamber – 1	
F	Sand filling in Joint Chamber – 2	
G	Concreting (width 30 cms, thickness 15	
	cms)	
Н	Any other items	A.
16	Remark of the Team in Charge of the	310
	Section.	- 1
	RAILIE	
17	Remark of the RailTel Representative at	
100	site.	and the state of t
11	allTel Corporatio	in or ingla Ltg.

16	Remark of the Team in Charge of the Section.
17	Remark of the RailTel Representative at
R	site.
	(A Mentacha Calegory Larkerprise)
Sigr	Signature of Contractor with seal nature of Engineer
Nan	ne:
Designation:	

### $\underline{Proforma-8}$

### **Availability of Essential Equipment**

G			Availability for	Non availability /
Sr.	<b>Essential Equipment</b>	Workability	the whole	Non workability with
No.			period	period
1	Generator set	Working/ Not working	Yes / No	From
2	Fusion Splicing Machine	Working/ Not working	Yes / No	From
3	Power source	Working/ Not working	Yes / No	From
4	Power meter	Working/ Not working	Yes / No	From To
5	OTDR	Working/ Not working	Yes / No	From To
6	1 Km length dummy fiber spool.	Working/ Not working	Yes / No	From To
7	Hot Air Gun / Blow lamp	Working/ Not working	Yes / No	From To
8	Innova/Bolero / Scorpio	Working/ Not working	Yes / No	From To
9	Tent / Garden Umbrella	Working/ Not working	Yes / No	From To
10	Telephone, Cell phone	Working/ Not working	Yes / No	From To
11	Tool/Tackles kit,	Working/ Not working	Yes / No	From To
12	Garden umbrella / Tent.	Working/ Not working	Yes / No	From To
13	Road – O – meter.	Working/ Not working	Yes / No	From To
14	OFC cable detector	Working/ Not working	Yes / No	From To
15	Lighting arrangement like emergency light/gas light	Working/ Not working	Yes / No	From
16	All sorts of patch cords	Working/ Not working	Yes / No	From To
17	Spare battery with charger for splicing machine.	Working/ Not working	Yes / No	From To
18	Aerial OFC( 24 Fiber) 500 m piece (approx)	Available	Yes / No	From To

• Strike out which is not applicable

Signature of Railtel Engineer

Signature of Contractor with seal

### MAINTENANCE CONTRACTOR MONTHLY PERFORMANCE (SOR-A)

Maintenance Section:	Headquarter:				
LOA/CA Valid up to:	Certificate for the Month of:				
Name of the Contractor:					
LOA/CA NO. & Date:					
OFC RKM: NO of Acs in the Wi	indow Type:	Split Type:	No.	of DG	sets in
Section:			the S	ection:	
WHETHER REQUIRED MINIMUM	I MANPO	WER, VEHI	CLE, I	EQUIPM	<b>IENTS</b>
AVAILABLE DURING THE BILLING P.	ERIOD? (Ye	es/No):			
If "No', then furnish details of what wa	ıs not availab	ole (give period	of non av	ailabilit	y):
(i)non availability period:	fromTo	oDa	ıys		
FOUR MONTHLY (QUADRIMESTRE) OTDR	WHETHER	SUBMITTED	DATE O	F SUBM	IISSION
TEST REPORT DUE ON (DATE):	(Yes/No):		OF OTDR		
Reconciliation statement for materials issued b	y RCIL has b	een received & ol	k (Yes / N	lo):	
Deateils of SOR-B Work Orders:	- //	7			
SL NO. SOR"B"WORK ORDER NO & DAT	E WORK	STATUS	PENAL	ΓΥ (Yes/N	<u>lo):</u>
		~ .			
Whether AC, DG sets, Voltage Stabilize		-		-	, W1-F1
systems in the sections have been maintain	The second secon		Yes / No	0)	
(If – NO: give details in separate sheet/reve			• •	• .•	.: 0
Whether any pending works prevailing a		-	-		
		etails in Annexu	re-G (Pro	oforma 9	A: For
Pending Works) & attach with this certification.  Bicycle/Foot Sub-sections where particular and sections.		Cub Section Non	20	No. of T	imag
Patrolling   Sub-sections where part	tronning not	Sub-Section Nan	ie	NO. 01 1	imes
Train Patrolling Sections where patro	olling not Section Name No. of Tin			imes	
complied thrice/week					
NO. OF FAILURES DURING THE BILLING	G PERIOD &	DETAILS,CERT	ΓΙΓΙCΑΤΙ	ETHERE	E OF:
ixanina an annipo	1 64 5 1 501	F. F. N. F. L. S. F.	10000	the state of	N. F.
(A Minimum Cal	econy	Proper	se)		
		sealing, Jt	Whethe	As-	
		Pit, Marker,	r all	built	
Locati		Sand filling	fiber ok		Temp
S Block on From To	Duration	done as per	after	wing	orary/
N Date Section (offset (Hrs.) (Hrs.)	(Hrs.)	requirements	rectific		Perma
)	(1115.)	(Yes/No): If	ation	ted	nent
		"No",	(Yes/N		licite
		Then which	0):	/N	
		work was not	0).	/11	
		done			
1					
2					
3					

- Note: (i) Attach the form 7'A' for all failures. Ensure that no cells of the form are left blank.
  - (ii) For any additional information with regard to the maintenance period, please use the reverse of this certificate and/or use additional sheet.
  - (iii) All over writing etc. are to be countersigned by the user of the certificate.,
  - (iv) For any failure duration for which "force majeure" clause is applicable separate recommendations with justifications for waiver may be attached with this certificate.
  - (ii) A copy of certificate is to be handed over to the contractor.
  - (vi) The certificate should be issued every month and should reach R.O by the 15<sup>th</sup> of the following month.

List of enclosures:

(Signature, Date & Stamp of the Engineer)

SM/AGM/DGM/JGM/TM



#### Proforma-9A

### **Annexure-G (For Pending Works)**

Sr. No.	Date of Failure	Date of Permanent Restoration	Period of Temp. condition	Section (Location) of Failure	Items Pending for Permanent Restoration	Status of Failure	Reason for Pending Works



RailTel Corporation of India Ltd.
(A Menizona Calegory | Linterprise)

#### Proforma-10

#### MAINTENANCE CONTRACTOR BILL CERTIFICATION (SOR B)

MAI	NT. SEC:			HQ:					
PER	PERIOD OF BILL :								
NAN	ME OF THE CONT	RACTOR	:						
BILI	NO. & DATE;								
LOA	/CA NO & DATE	:			LOA/CA I	PERIOD :			
BILI	BILL RECEIVED ON:  BILL CERTIFIED & SENT TO R.O. ON:								
REA	SON WHY 'SOR	-B' WOR	K WA	S NECES	SITATED	(Attach sep	parate sheet if		
	ssary) :								
CER	TIFICATE OF WC	RK DONE	Ξ:		7(0)				
Sl No	Short description of the work done	SOR B Sch ref. of the item	Unit	Unit rate as per SOR-B (Rs.)	Qty claimed by the Contractor	Actual Qty executed	Certification of quality of work done by the Contractor		
1									
2		-	10	100	ज				

- NOTE: (i) For any additional information with regard to the bill, please use the reverse of this certificate.
  - (ii) All over-writing etc. are to be countersigned by the issuer of the certificate.
  - (iii) Attach copy of the measurement certificate which was issued immediately after completion of the work.
  - (iv) A copy of this certificate is to be handed over to the Contractor (for raising bill).
- (v) Attach contractor's bill and other forms in connections with the work done.
  - (vi) The certificate with all enclosures (including bill of contractor) should be sent to R.O within 10 days from the date of receipt of the bill.

List of enclosures:

(Signature, Date & Stamp of the Engineer of the section)

SM/AGM/DGM/JGM/TM

# $\begin{array}{c} Proforma-11 \\ \underline{AC-1} \end{array}$

### **Joint Inspection Report of Air Conditioner**

Station:

CLAL	Defect noticed / services	Air Conditioner					
Sl No	required	No 1	No 2	No 3	No 4		
1	Compressor defective	Yes / No	Yes / No	Yes / No	Yes / No		
2	Require Gas Charging	Yes / No	Yes / No	Yes / No	Yes / No		
3	Steiner Capillary defective	Yes / No	Yes / No	Yes / No	Yes / No		
4	Running Capacitor defective	Yes / No	Yes / No	Yes / No	Yes / No		
5	Starting Capacitor defective	Yes / No	Yes / No	Yes / No	Yes / No		
6	Motor Capacitor defective	Yes / No	Yes / No	Yes / No	Yes / No		
7	Front Grill defective	Yes / No	Yes / No	Yes / No	Yes / No		
8	Relay defective	Yes / No	Yes / No	Yes / No	Yes / No		
9	Fan Motor defective	Yes / No	Yes / No	Yes / No	Yes / No		
10	Blower Fan defective	Yes / No	Yes / No	Yes / No	Yes / No		
11	Stabilizer 5 kva defective	Yes / No	Yes / No	Yes / No	Yes / No		
12	Change over unit (timer) defective	1					
Other	defects (if any)	70					
13	111		3				
14	RAII	TEI	1				
15	117411	m I has I	-				
16							
17	Working properly with effective cooling	ation	of I	ndia	Ltd.		

chective cooming	
Signature of Engineer:	Signature of Contractor's Representative:
Designation:	Designation:
Name:	Name
Date·	Date:

<u>Proforma-12</u> <u>AC - 2</u>

### Air Conditioner Breakdown Report Card

### Number of Air Conditioner Installed: 1/2/3/4

(Strikeout whichever is not applicable)

### **Station:**

Machine	Machine Failed on		Machine Repaired on		Failure	Status after repairing	Signature representative of	
No	Date	Time	Date	Time	duration (hrs)	Working /Not working	Engineer	Contractor
				1		<b>\</b>		
				9. 1				
				1		1		
		1		N.	1			
				1				
			1	7	8			
			20	40	M			
		7%						

Signature of Engineer:	Signature of Contractor's Representative:
Designation:	Designation:
Name:	Name
Date:	Date

 $\frac{Proforma-13}{AC-3}$ 

### **Air Conditioner Servicing Report Card**

### Number of Air Conditioner Installed: 1/2/3/4

(strike out whichever is not applicable)

**Station:** 

Servicing of each machine: To be done once in three months

		Servici	ng	Status	Signature of	
Description of machine & details of servicing		Due date	Done on	Working / Not working	Engineer	Contractor representati ve
3.6 1 '	Servicing - 1	/				
Machin e	Servicing – 2					
No 1	Servicing – 3		-/0			
110. 1	Servicing – 4		- 11			
Machin	Servicing – 1			- N		
	Servicing – 2	1	- 11			
e No	Servicing – 3		1			
	Servicing – 4		1			
	Servicing – 1	1				
Machin	Servicing – 2	-7	ad a	1 41		
e No	Servicing – 3	1	610	-01		
	Servicing – 4		ATT	ole her I		
Machin	Servicing - 1	K	AIL			
	Servicing – 2					
e No	Servicing – 3					
T R	Servicing – 4	OF	more	tion	of Ind	ia Itd

Signature of Engineer:	Signature of Contractor's Representative
Designation:	Designation:
Name:	Name:
Date:	Date:

## Proforma-14

### <u>DG – 1</u>

### **Joint Inspection Report of DG Set**

### **Station:**

Sr. No.	Defect noticed / services required	Status
1	DG Set fails to start	Yes / No
2	Alternator is not giving output voltage	Yes / No
3	Alternator output voltage is fluctuating	Yes / No
4	Alternator is not delivering load	Yes / No
5	Frequency of output voltage is out of range	Yes / No
6	Multi Display meter is not working	Yes / No
7	AMF panel of DG Set is not working	Yes / No
8	DG Set, Battery charger is not working	Yes / No
9	Input Contactor coil is defective	Yes / No
10	Output Contactor coil is defective	Yes / No
11	Battery is not taking load during start	Yes / No
12	Exhaust Fan is not working	Yes / No
	7	
Other	defects (if any)	
12		
13	RAILIEL	
14		
15		
16	Working properly with effectively delivering the load	lia Lt

Signature of RailTel Engineer	Signature of Contractor's Representative:
Designation:	Designation:
Name:	Name
Date:	Date

### Proforma-15

**DG - 2** 

### **Diesel Generator Set Breakdown Report Card**

(Strike out whichever is not applicable)

Sr.	DG Failed		DG Repai	Set ired on	Failure	Status after repairing	Signature representative of			
No.	Date	Time	Date	Time	duration (hrs)	Working / Not working	RailTel	Contracto r		
				-						
					1	7				
					1					
			7	-						
			7	do	20					
			D A	III '	TEI					

Signature of Engineer:	Signature of Contractor's Representative:
Designation:	Designation:
Name:	Name
Date:	Date

 $\frac{Proforma-16}{DG-3}$ 

### **Diesel Generator Set Servicing Report Card**

(strike out whichever is not applicable)

### **Station:**

Table - 1

			A	fter Ever	y 3 moi	nths		
Activities	Qtr –	1	Qtr –	2	Qtr –	3	Qtr – 4	ı
Activities	Due	Done	Due	Done	Due	Done	Due	Done
	date	on	date	on	date	on	date	on
Drain out sump oil from								
Engine.	- 1							
Fill the fresh Engine Oil 20								
W 40.	- 40	- 10						
Replace Oil Filter		- 11						
Assembly/Element.		- 11						
Drain out water droplets	- 1	- //	1	7				
from fuel filter bowl by	- //	. 7	. /					
Drain screw (see note - 1								
below).		-						
Clean the fuel feed pump		1						
bowl and it's Filter.			7					
Clean the Air cleaner	. (	0	31					
Primary Filter by just								
blowing air from inside to	$\Delta I$	LTI	-					
outside.	CI	-11						
Clean Air Cleaner filter								
housing by dry cloth.					-		2007	
Adjust tappet clearance of	DO	ratii	on	01.1		aL	to.	
the both valve as per	-							
specified Value.	(C)	SCOTY	- 11	interp	r.ce			
Clean the Breather								
Assembly.								
Take out primary Fuel Filter								
Element & Dispose off.								
Take out Secondary Fuel								
Filter Element & Fit in								
primary Filter Pot.								
Replace in secondary pot								
new Fuel Filter Element.								
Check V-Belt condition & if								
need Adjust it.								

Checking & Tightening of	f							
Pedestal Mounting Nut								
Bolts.								
			Af	ter Every	3 mon	ths		
Activities	Qtr -	1	Qtr – 2		Qtr - 3		Qtr-4	
Activities	Due	Done	Due	Done	Due	Done	Due	Done
	date	on	date	on	date	on	date	on
Check electrolyte level in								
each Battery cell, if need		1						
top up.	/							
Clean the Battery	- 1	0.0						
terminals and smears them		A 1		1				
with petroleum jelly.								

#### Table - 2

Activities	After every	12 months	After every 18 month		
Activities	Due date	Done on	Due date	Done on	
Replace Air Cleaner primary	1	-			
Filter or earlier (see note - 2					
below)	1				
Check Injectors pressure, spray	J _ L _	A.			
pattern & Dribbling at	100	31			
Authorised Service Centre.					

#### Note:

- 1. According to environmental conditions, drain the water from fuel filter assembly by loosing the drain screw at the bottom of fuel filter. If humidity is more, then drain after every 15 days.
- 2. The filter choking time depends on user's environmental conditions, normal life of filter element is approximate 1000 hours. If choke indicator indicates choking before 250 hours or its choking frequency trend is increasing, then replace the new primary filter element.

Signature of Engineer:	Signature of Contractor's Representative:
Designation:	Designation:
Name:	Name

#### Proforma-17

**DG - 4** 

### List of Periodical Upkeep to be carried out for "Engine, Alternator & Control Panel".

#### Monthly:

- 1. Check Diesel level in fuel tank and record
- 2. To check for leakage of Oil & Diesel in the D.G Set.
- 3. Drain out sump oil from Engine.
- 4. Fill the fresh Engine Oil 20 W 40.
- 5. Drain out water droplets from fuel filter bowl.
- 6. Clean the Air cleaner Primary Filter by just blowing air from inside to outside.
- 7. Clean the fuel feed pump bowl and it's Filter.
- 8. Clean Air Cleaner filter housing by dry cloth.
- 9. Clean the Breather Assembly.
- 10. To check tightness of Mechanical Components in the Engine.
- 11. Tighten all Bolts & Nuts in the coupling of the D.G Set.
- 12. Adjust tappet clearance of the both valve.
- 13. Check Battery voltage.
- 14. Check the Battery Charging Circuit in the panel.
- 15. Check specific gravity & level of Battery electrolyte, if needed top up.
- 16. Clean the Battery terminals and smears them with petroleum jelly.
- 17. Check the Healthiness of Electronic Panel & its Operation.
- 18. Check Healthiness of Mechanical Safeties in Engine & Electrical Safeties in Panel
- 19. Check and monitor all mechanical readings from Gauges.
- 20. Check the Terminal connections inside the Alternator Terminal Box.
- 21. Check automatic switching on & off of cooling fan.
- 22. Check tightness of all connections in the terminals.
- 23. Check V-Belt condition & if need Adjust it.
- 24. Replace Oil Filter Assembly/Element.

#### Bi-monthly:

Carry out all types of Maintenance as per Monthly Visit.

- 1. Take out primary Fuel Filter Element & Dispose off.
- 2. Take out Secondary Fuel Filter Element & Fit in primary Filter Pot.
- 3. Replace in secondary pot new Fuel Filter Element.
- 4. Check oil level in the sump by Dipstick mark.

#### **Quarterly**:

- 1. All the Maintenance as per Monthly Visit.
- 2. Carry out cleaning of Air Filter, AVR Connections etc.
- 3. Check for coupling healthiness.

#### Annual:

- 1. Carry out all monthly checks.
- 2. Replace Air Cleaner primary Filter.

#### One and half yearly:

- 1. Carry out all monthly checks.
- 2. Check Injectors pressure, spray pattern & Dribbling from a Authorized Service Centre

## Proforma-18

<u>DG - 5</u>

# Schedule of Periodical upkeep of DG Set Engine (Recommended by Manufacturer):

Category	Periodicity
A	Activities on monthly basis
В	Activities on Bi-monthly basis
С	Activities on quarterly basis
D	Activities on Annual basis
Е	Activities on one and halh basis

Activities	A	В	C	D	E
Check Diesel level in fuel tank and record	•	•	•	•	•
Check oil Diesel leakage and diesel in the D G Set.	•	•	•	•	•
Drain out sump oil from Engine.	•	•	•	•	•
Fill the fresh Engine Oil 20 W 40.	•	•	•	•	•
Drain out water droplets from fuel filter bowl.	•	•	•	•	•
Clean the Air cleaner Primary Filter by just blowing air from inside to outside.	•	•	•	•	•
Clean the fuel feed pump bowl and it's Filter.	•	•	•	•	•
Clean Air Cleaner filter housing by dry cloth.	•	•	•	•	•
Clean the Breather Assembly.	•	•	•	•	•
To check tightness of Mechanical Components in the Engine	•	•	•	•	•
Tighten all Bolts & Nuts in the coupling of the D.G Set.	•	•	•	•	•
Adjust tappet clearance of the both valve as per specified Value.	a	•		•	•
Check Battery voltage.	•	•	•	•	•
Check the Battery Charging Circuit in the panel.	•	•	•	•	•
Check electrolyte level in each Battery cell, if need top up.	•	•	•	•	•
Clean the Battery terminals and smears them with petroleum jelly.	•	•	•	•	•
Check the Healthiness of Electronic Panel & its Operation.	•	•	•	•	•
Check Healthiness of Mechanical Safeties in Engine & Electrical Safeties in Panel.	•	•	•	•	•
Check and monitor all mechanical readings from Gauges.	•	•	•	•	•
Check the Terminal connections inside the Alternator Terminal Box.	•	•	•	•	•

Check automatic switching on & off of cooling fan.	•	•	•	•	•
Check tightness of all connections in the terminals.	•	•	•	•	•
Check V-Belt condition & if need Adjust it.	•	•	•	•	•
Replace Oil Filter Assembly/Element.	•	•	•	•	•
Take out primary Fuel Filter Element & Dispose off.		•	•	•	•
Take out Secondary Fuel Filter Element & Fit in primary		•	•	•	•
Filter Pot.					
Replace in secondary pot new Fuel Filter Element.		•	•	•	•
Check oil level in the sump by Dipstick mark.		•	•	•	•
Carry out cleaning of Air Filter, AVR Connections etc.			•	•	•
Check for coupling healthiness.			•	•	•
Replace Air Cleaner primary Filter				•	
Check Injectors pressure, spray pattern & Dribbling a Authorized Service Centre.					•

#### Note:

- 1. Accordingly environmental conditions needs, drain the water from fuel filter assembly by loosing the drain screw at the bottom of fuel filter. If humidity is more than drain after every 15 days.
- 2. The filter choking time depends on user's environmental conditions, normal life of filter element is approximate 1000 hours. If choke indicator indicates choking before 250 hours or its choking frequency trend is increasing, then replace the new primary element.



Proforma-19

Fiber s	summary for the	year	•••••							
Section	1:		•••••							
	Optical Length:		K	m						
	Date of Measurement									
								3 rd fou	ır mont	h of the
		I st four	month o	of the year	2 nd four	month o	of the year		year	
Fibre No.	Fibre length / deployment	Optical Length (km)	Loss (dB)	Av. Loss (dB/km)	Optical Length (km)	Loss (dB)	Av. Loss (dB/km)	Optical Length (km)	Loss (dB)	Av. Loss (dB/km)
1				1 1						
2				7 1						
3										
4										
5				11 11						
6				// U						
7				10						
8				W - W						
9				N . N	. /					
10				N.						
11										
12										
13										
14										
15			1							

Signature & Name of Engineer of the section

Date

]	Format for recording informations on running of 5/7.5/15 KVA, D.G.Set installed at each											
	location											
	Information regarding running of D.G.Set and pouring of "Diesel Oil"											
Sr.	Da	Hour	Hour	Reading	Quanti	Reading	"Diesel	Signature of	Signature			
No	te	meter	meter	of "Oil	ty of	of "Oil	Oil"	Maintenance	of			
		readin	reading	level	"Diesel	level	poured	Team	RailTel			
		g	(on	indicator	Oil''	indicator	by	representativ	represent			
		(Anal	MDM)	'' before	poured	'' after	Maintena	e, <b>if, Diesel</b>	ative			
		og)		pouring	(Litre)	pouring	nce team	Oil is				
				Diesel	/	Diesel	/ RailTel	poured by				
				Oil	1	Oil	represent	Mntce team				
							ative					
1					//							
2					11							
3				1000		W.	,					
4				1			/					
5												
6				- 10								
7					ad.	1						
8				-	610	-01						
9				D	AII.	TEL						
10				111	MIL	I has he						

<sup>\*</sup> For test run, The RailTel Engineer will note Hour-meter eading at start ,at stop & duration of run of D.G.set & jointly sign the report with contractor.

# **Chapter-16**

### **BID DATA SHEET**

Websites: TCIL Portal: https://www.tcil-india-electronictender.com RCIL Portal: www.railtelindia.com

The section consists of provisions that are specific to various clauses of Tender Document.

Reference	Description							
Tender No.	RailTel/Tender/OT/ER/HQ/2018-19/1067-73, dated 01.01.2019							
Name of Work	Deployment of maintenance teams for maintenance of OFC cable network and upkeep of associated gears like AC, DG, Stabilizer, Change over unit, Shelter and Wi-Fi Equipments in Cuttack, Bhubaneswar, Rangiya, Guwahati, Lumding, Jorhat & Tikiri sections for a period of 3 years and extendable by one year on same terms and conditions.							
	Address: General Manager/Operations							
	Eastern Region							
	Railtel corporation of India Ltd.							
	33A, Jawaharlal Nehru Road							
Tender Notice	Chatterjee International Centre, 3 <sup>rd</sup> Floor							
Telluel Notice	Kolkata – 700 071							
	Last date of submission of e-bids (Online):							
	On to 07.02.2019 up to 15:00 Hrs.							
	Date & Time of opening of e-tender (online):							
	On 07.02.2019 at 15:30 Hrs.							
Offer Validity	Vaidity of offer							
Offer variatey	60 days (Sixty days) From the date of opening of tender							
Tender condition-	Eligiblity criteria							
clause para 3 of	As per clause 3.1 for Technical eligibility and clause 3.2 for							
preamble	financial capability							
Tender condition –	Earnest money							
preamble para 9	As per para 9 of preamble							
Tender Condition-	STORAGE PROPERTY AND ADDRESS OF THE PERSON							
Preamble para 21	Performance bank guarantee- As per para 21 of preamble							
Tender condition-	Security Deposit							
preamble para 22	As per para 22 of preamble							
Chapter 10	SOR-A Rates to be quoted by bidders							
Form-III	Form for Offer Letter & Offer Sheet							
Chapter 13	Instructions to Tenderers & General Conditions of Contract							
Chapter 14	Special Conditions of Contract							
Chapter 17	Drawings							

**Chapter-17** 

**DRAWINGS** 

रेलटेल RAILTEL

RailTel Corporation of India Ltd.
(A Meuratra Category | Linterprise)















