RAILTEL CORPORATION OF INDIA LIMITED

(A Govt. of India Undertaking)

NORTHERN REGION

OPEN TENDER DOCUMENT

"INSTALLATION OF MAINTENANCE FREE CHEMICAL
(GEL) EARTHING SYSTEM AT VARIOUS LOCATIONS OF
HARYANA AND CHANDIGARH."

(Tender No. RailTel/OT/NR/CHEMICAL (GEL) EARHTING/15-16/15)

Copy no.:

Sent to:



INDEX SHEET

Sr. No.	Chapter	Contents	Page No.
1.		Tender Notice	3
2.	Chapter I	Offer Letter	4
3.	Chapter II	Schedule of Requirements	5
4.	Chapter III	Commercial Terms & Conditions	6-14
5.	Chapter IV	Proforma for Performance Bank Guarantee	15-16
6.	Chapter V	Technical Specification	17
7.	Chapter VI	List of Address for Specification	18
8.	Annexure-I	Name of locations/ Station where Earthing is to be done	19-22
9.	Annexure-II	Diagram	23



RailTel Corporation of India Ltd.

(A Government of India Undertaking)

Northern Region

OPEN TENDER NOTICE

Tender No. RailTel/OT/NR/CHEMICAL (GEL) EARHTING/15-16/15 Dated: 11.12.2015

Regional General Manager, RailTel Corporation of India Limited, Northern Region, New Delhi, invites the sealed Open Tenders in "single packet" system from established contractors with proven experience for "Installation of Maintenance free Chemical (GEL) Earthing System at various locations of Haryana and Chandigarh" as per following details:

a)	Sale of Tender	25.12.2015 to 25.01.2016 (From 11:00 Hrs to 17:00 Hrs)
b)	Last date & time of submission of tender:	Up to 15:00 hrs on 27.01.2016
c)	Date & time of opening of tender:	At 15:30 hrs on 27.01.2016 (If the date of opening happens to be a holiday the tender will be opened on next working day at same time.)
d)	Approximate cost of Tender	Rs. 13.41 lacs
e)	Earnest money:	Rs. 27,000/-
f)	Validity of offer	90 days
g)	Completion period	45 days
h)	Cost of Tender Document:	Rs. 5,250/- (Five Thousand Two Hundred Fifty only) including VAT, Surcharge and Rs.5,775 /-(Five Thousand Seven Hundred Seventy Five only), if required by post including VAT, Surcharge and postage charges of Rs. 500/-
i)	Note:	Tender Document may be obtained between 11:00 hrs to 17:00 hrs from 25.12.2015 to 25.01.2016 from the office of Executive Director, Northern Region, New Delhi by paying the cost of tender document through Bank Draft in favour of "RailTel Corporation of India Limited" payable at New Delhi. RCIL shall not be responsible for late receipt of tender documents for any postal delay, if required by post.

DGM/Project
For Regional General Manager/Northern Region

Chapter I

OFFER LETTER

To RailTel Corporation of India Limited, Northern Region 6th Floor, Block III, Delhi IT Park, Shastri Park, Delhi-110053.

I/We	have read
the various conditions to tender	attached here to and hereby agree to ABIDE BY THE
SAID CONDITIONS. I/We also	agree to keep this tender open for acceptance for a
period of 90 days from the date t	fixed for opening the same and in default thereof, I/We
will be liable for forfeiture of m	y/our Earnest Money. I/We offer to do the supply of
material as per Schedule of Re	equirement for Tender No. RailTel/OT/NR/CHEMICAL
(GEL) EARHTING/15-16/15 Date	ed: 11.12.2015 for RailTel Corporation of India Limited
at the rates quoted in the attac	ched schedules and hereby bind myself/ourselves to
supply the material within 45 day	s from the date of issue of Purchase Order. I/We also
hereby agree to abide by the Var	rious Conditions of Contract and to carry out the supply
according to the Specifications	for materials laid down by the Railtel for the present
contract.	

SIGNATURE OF CONTRACTOR (S)

Date

SIGNATURE OF WITNESS

CONTRACTOR (S) ADDRESS

1. 2.

Chapter II **SCHEDULE OF REQUIREMENTS:**

Tender No. RailTel/OT/NR/CHEMICAL (GEL) EARHTING/15-16/15 Dated: 11.12.2015

SN	ITEM	Qty	Unit	Unit Price (in Rs.)	Total Amount (in Rs.)
1	Installation of maintenance free Chemical (Gel) Earthing System consisting of G.I. Pipe Technology Electrode with outer dia 60mm and inner dia 30mm filled with highly conductive compound with B.F.C. compound of 40 Kg as per the drawing attached.	115	No.	10,994	12,64,310
	VAT/Tax@6.05%		100		76,491
	TOTAL 13,40,801				13,40,801

Amount in Words: Thirteen Lakh Forty Thousand Eight Hundred One Only.

			vork of "Installation of s (as per Annexure-I	
			rial as per the drawing	
above/below* the Sch	edule of rates shown	above."		ŕ
The requisite EMD f	or an amount of Rs.		submitted v	ide DD
No	dated	drawn on		bank.
(*Strike out 'above' o assumed.)	or 'below' as desired	. In case neithe	r is struck off 'below'	will be
		SIG	SNATURE OF CONTRAC	CTOR (S)

CHAPTER III

Commercial Terms & Conditions

1. Offer letter and Validity of Offer

1.1 **Qualifying Criteria:**

1.1.1 **Technical Criteria**

The Bidder must have experience of Installation of Maintenance free chemical Earthing System. He should have completed at least one work of Earthing System from start to finish of value not less than 35% of the estimated cost of tenders in the current and the last 3 financial years before the date of opening of this tender for Govt./Semi Govt/State Govt/Reputed Telcos. Documentary evidence for such experience must be furnished along with the offer.

1.1.2 Financial Criteria

- (a) The Bidder should have received total contract amount of 150% of the estimated cost of tender in the last three financial years.
- (b) The Bidder should produce the Audited Profit/Loss account and Balance Sheet for the last three financial years.
- 1.2 The offer should remain valid for a period of **90 days** from the date of opening.

2. Warranty

- 2.1 The Equipment/materials are to be warranted for **60 months** from date of completion of work. The contractor shall warrant that stores to be supplied shall be new and free from all defects and faults in material, workmanship and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards of materials of the type ordered and shall perform in full conformity with the specifications and drawings. The contractor shall be responsible for any defects that may develop under the conditions provided by the contract and under proper use, arising from faulty materials, design or workmanship such as corrosion of the equipment, inadequate quantity of material to meet equipment requirements, inadequate contract protection, deficiencies in circuit design and / or otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser who shall state in writing in what respect the stores are faulty.
- 2.2 If it becomes necessary for the contractor to replace or renew any defective portion/portions of the equipment under this clause, the provisions of the clause shall apply to the portion/portions of the equipment so replaced or renewed or until the end of the above mentioned period of sixty months, whichever may be later, if any defect is not remedied within a reasonable time, the Purchaser may

proceed to do the work at the contractor's risk and expenses, but without prejudice to any rights which the Purchaser may have against the contractor in respect of such defects.

2.3 Replacement under warranty clause shall be made by the contractor free of all charges at site including freight, insurance and other incidental charges.

3. Completion of Work:

The entire work shall be completed within **45 days** of issue of "LOA". The materials are required to be installed at BNMC, DNMC & SNMC Various locations of Haryana & Chandigarh as indicated in Annexure-I.

4. Payment Terms

- 4.1 90 % (Ninety percent) payment will be released on completion of work at individual site. A site will be considered to be completed after the completion of work, joint measurement and testing of earthing to the satisfaction of RailTel Engineer in-charge.
- 4.2 5 % (Five percent) value of the work/services completed shall be made after the issue of Provisional Acceptance Certificate (PAC) on successful completion of entire work as certified by the RailTel Engineer in charge.
- 4.3 Final payment of 5 % (Five percent) value of the work/services completed shall be made after satisfactory of the work under the supervision of the contractor for a period of one year after successful completion of entire work and issue of Final Acceptance Certificate (FAC) by the RailTel Engineer in charge.

5. Performance Bank Guarantee (PBG)

The supplier is required to submit a Performance Bank Guarantee (PBG) within 7 days of issue of Work Order for 10 % of the value of the order and valid for a period of 4 months beyond the expiry of warranty period as per para 2 above. The PBG shall be returned after successful completion of contractual obligation and acceptance of material duly accepted by consignee. The performa for PBG is given in Chapter IV. The PBG will be forfeited if the contract is terminated by the Purchaser on account of Contractor.

6 Taxes & Duties

Please see clause 18.

7 Liquidated Damages

The timely delivery is the essence of this project, Liquidated damages will be applicable at the rate of half percent per week or part thereof for undelivered portion subject to a maximum of 10 % of the cost of supply. RailTel will have the

right to cancel the order, place order on alternative source at risk & cost of the supplier besides levying the L.D.

8 Transportation

The rates quoted should be F.O.R. destination.

9. Statutory Deduction

These will be made at source as per the rules prevalent in the area of work.

10. Issue of Work Order/ Award of Contract

The purchaser shall consider placement of orders for commercial supplies on those bidder whose offers have been found technically and commercially acceptable and are lowest. The issue of Work Order shall constitute the award of contract on the bidder. The bidder shall within 7 days of issue of Work Order, give his acceptance along with Performance Bank Guarantee as per Clause 5.

11. Purchaser's Right to Vary Quantities

The Purchaser reserves the right at the time of award of contract to **increase or decrease** by **upto 25** % of the quantity of goods and services specified in the Schedule of Requirements without any change in unit price of the ordered quantity or other terms and conditions.

12. Deleted

13. Purchaser's Right to accept any Bid and to reject any or all Bids

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

14. Deleted

15. Issue of Work Order and Award of contract - Please see Clause 10.

16. Annulment of Award

Failure of the successful bidder to comply with the requirement of Clause 5 shall constitute sufficient ground for the annulment of the award and forfeiture of EMD in which event the Purchaser may make the award to any other bidder at the discretion of the Purchaser or call for new bids.

17. Earnest Money Deposit (EMD)

Earnest Money as per Tender Notice shall be submitted in the form of Demand Draft from any Nationalised / Scheduled bank in India in favour of "RailTel Corporation of

India Ltd. payable at New Delhi." EMD may be forfeited if a bidder withdraws his offer or modifies the terms and conditions of the offer before validity period and in the case of a successful bidder, if the bidder fails to accept the Work Order and furnish performance security in accordance with clause 5 and 10.

- 17.1 Tenders not accompanied by Earnest Money shall be summarily rejected.
- 17.2 Earnest Money of the unsuccessful bidder will be discharged/returned as promptly as possible.
- 17.3 The successful bidder's bid security will be discharged upon the bidder's acceptance of the Work Order satisfactorily and furnishing the performance bank guarantee in accordance with **clause 5**.

18. BID PRICES, Taxes & Duties

- 18.1 The bidder shall give the total composite price inclusive of all levies and taxes, packing, forwarding, freight and insurance etc. The basic unit price and all other components of price need to be individually indicated against the goods it proposes to supply under the contract as per schedule given in Chapter 2. The price shall be firm in Indian Rupees and F.O.R. Destination. No Foreign exchange will be made available by the purchaser. Sales Tax Form "C" shall be provided by RailTel.
- 18.2 The break up of price of each item of SOR in terms of basic Unit price, Excise duty, Sales Tax, Freight, Forwarding, Packing, Insurance and any other Levies/charges already paid or payable by the supplier shall also be quoted separately.
- 18.3 The price quoted by the bidder shall remain fixed during the entire period of contract and shall not be subject to variation on any account.

19. Clause wise Compliance

Clause wise compliance statement of the Technical Specifications and Commercial Terms & Conditions shall be enclosed with the offer along with technical literature of the material and other documents in support of relevant clauses.

20. Provenness of the material/equipment supplied:

In order to enable the Purchaser to assess the provenness of the materials/equipments offered, the bidder shall provide documentary evidence regarding the materials being offered by him.

21. Training - Deleted.

22. Inspection

Materials should be inspected at the site before the starting of the work.

- 22.1 Deleted.
- 22.2 Deleted.
- 22.3 Deleted.

23. Force Majeure

Force majeure shall mean -

- War, hostilities (whether war be declared or not), invasion, act of foreign enemies.
- Rebellion, revolution, insurrection or military or usurped power, or civil war.
- Ionizing radiation, or contamination by radio-activity from any nuclear fuel, or from any nuclear waste from the combustion of nuclear fuel, radio active toxic explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof.
- Presume waves caused by aircraft or other aerial devices traveling at sonic or supersonic speeds.
- Riot, commotion or disorder, unless solely restricted to employees of the Contractor or of his Subcontractors and arising from the conduct of the works.
- Loss or damage due to the use or occupation by the Employer of any section or part of the permanent works, except as may be provided for in the contract.
- Loss or damage due to the extent that it is due to the design of the works, other than any part of the design provided by the contractor or for which the contractor is responsible, and
- Any operation of the forces of nature against which an experienced contractor could not reasonably have been expected to take precautions.

24. Settlement of Disputes

24.1 For all commercial contracts with Private entities:

In case of any dispute concerning this order both the supplier and RailTel shall try to settle the same amicably through mutual discussion/negotiations. Any unsettled dispute shall be settled in terms of Indian Act of Arbitration and conciliation 1996 or any amendment thereof. Place of arbitration shall be New Delhi. Arbitrator shall be appointed by Managing Director, RailTel Corporation of India Limited.

24.2 For all commercial contracts with Public Enterprises/ Govt. Departments:

In the event of any dispute or difference relating to the interpretation and application of the provisions of the contracts, such dispute or difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprise. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the Arbitrator shall be binding upon the parties to the dispute, provided, however, any party

aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary/Additional Secretary, when so authorized by the Law Secretary, whose decision shall bind the Parties finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator

25. Governing Laws

This contract shall be interpreted in accordance with the laws of India. The courts at New Delhi shall have exclusive jurisdiction to entertain and try all matters arising out of this contract.

26. Termination for Default

- 26.1 The purchaser may without prejudice to any other remedy for breach of contract, by written notice of default, sent to the supplier, terminate this order/contract in whole or in part.
 - a) If the supplier fails to deliver any or all of the goods within the time period(s) specified in the order/contract.
 - b) If the supplier fails to perform any other obligation(s) under the contract; and
 - c) If the supplier, in either of the above circumstance(s) does not remedy his failure within a period of 30 days (or such longer period as the Purchaser may authorize in writing) after receipt of the default notice from the purchaser.
- In the event the purchaser terminates the order/contract in whole or in part, the Purchaser may proceed, upon such terms and in such manner as it deems appropriate, goods similar to those undelivered and the supplier shall be liable to the Purchaser for any excess cost for such similar goods. However, the supplier shall continue performance of the order/contract to the extent not terminated.

27. Termination for Insolvency

The purchaser may at any time terminate the order/contract by giving written notice to the supplier, without compensation to the supplier, if the supplier becomes bankrupt or otherwise insolvent as declared by the competent court provided that such termination will not prejudice or affect to the Purchaser.

28. Deleted

29. Submission of Tender Bid (Single Packet System):

29.1 The tender bid shall be submitted in a sealed cover super scribing it with 'the name of Tender' and 'due date of opening' and shall be addressed to:

Regional General Manager/Northern Region,
RailTel Corporation of India Ltd.,
6th Floor, Block III, Delhi IT Park,
Shastri Park, Delhi-110053.

- 29.2 Earnest Money Deposit (EMD) equal to Rs. 27,000/- (Rupees Twenty Seven Thousand only) in the form of Account Payee Bank Draft in favour of RailTel Corporation of India Limited, payable at New Delhi, should be enclosed with the tender bid. The envelope containing the bid should be sealed by the personal seal of the bidder. Each and every page of the bid should be numbered and signed by authorized representative of the firm. Power of attorney in favour of the signatory duly authorizing the signatory shall be enclosed with the bid.
- 29.3 The Tender document issued by RailTel should be signed on each page along with stamp of the company/Firm and should be submitted along with bid.
- 29.4 The envelope shall bear name of the work, the tender no. and the words "DO NOT OPEN BEFORE" (due date).
- 29.5 Bid should be delivered to the above address so as to reach up to **15:00 hours** of **27.01.2016** The bids shall be opened at **15:30** hours on the same day in the above office in the presence of those representative of the bidders who choose to be present. Bids received after due date and time shall be summarily rejected and shall not be opened. If the above said date happens to be a holiday the same shall be done on the next working day.

30.0 UNIT PRICES

- 30.1 The prices quoted by the Tenderer shall include the prices of materials including all incidental charges for transport, loading/unloading and handling of materials, charging for arranging dispatch by rail/road direct from manufacturer's factory. The prices would also include charges towards completing all necessary formalities such as submission of forwarding notes, arranging placement of Wagon, Siding/shunt charges, banker's charges for Bank guarantee, Indemnity Bonds inclusive of cost of Stamp etc. as applicable and also the charges, if any, levied by the RailTel.
- 30.2 The prices shall include all taxes, duties, Royalty and levies (including, Custom Duty with/without High Sea Sale etc.) applicable on this contract. Therefore, the bidder should quote their prices taking into account the rate of central sales tax/local sales tax/ VAT or any other tax leviable on contract. The breakup of price of each item of SOR in terms of basic Unit price, Excise duty, Sales Tax, Freight, Custom Duty, Forwarding, Packing, Insurance and any other Levies/charges already paid or payable by the tenderer shall be quoted in the SOR. Any changes in statutory duties/taxes after opening of technical bid will be to RailTel's account within the contracted delivery period.

The Octroi/entry tax shall be paid extra as per actual on production of proof of payment/document.

Form-C will be issued by RailTel for items in Schedule of Supplies, if applicable.

- 30.3 The prices quoted by the tenderer shall include cost of commissioning and testing and all costs of Administration of Contract, Insurance Premium, Banker's charges for guarantees, custom handling, cost of storage in custom and other locations during execution of work, loading-unloading and handling of materials and road transport which the contractor may use for carriage of materials to his depot/ site of work and any other charges incurred towards delivery of the material at site. The prices shall include the cost of works and adjustments necessary to be done by the contractor during or after tests carried out by the purchaser.
- 30.4 The price to be quoted by the tenderers should take into account the credit availed on inputs under the CENVAT scheme. The tenderers should give a declaration that any set off in respect of duties on inputs as admissible under law is being totally and unconditionally passed on to the purchaser in the price quoted by him. The bidder in this regard shall submit the details of breakup of Excise Duty, Counter Vailing Duty, Service Tax and Surcharge & Cess on these, so that RailTel can avail the CENVAT credit benefit. The firm will furnish documentary evidence of such duties/taxes paid, to enable the purchaser to avail CENVAT credit.
- 30.5 The prices quoted in the contract shall be inclusive of all taxes i.e. custom duty, excise duty, local levies, sales tax levied by any statuary authority, VAT or any other tax. The tenderer will indicate the details of taxes included in the unit price. Offer received without specific details/ breakup of various taxes included in the unit prices are liable to be summarily rejected.
- 30.6 The purchaser shall make statutory deductions if required to do so. The deducted amount shall be remitted to the concerned authority and the purchaser shall in no way be responsible for any disputes between such authorities and the contractor in this regard.
- 30.7 All taxes, duties and levies arising out of the transaction between the contractor and his sub contractor/supplier for this work will be included in the rates quoted by the contractor in the relevant Schedule.
- 30.8 Arrangement for all permits/licenses required for delivery of materials at site including Road Permits etc. will be the responsibility of contractor and the contractor will have to make his own arrangements. RailTel shall facilitate by way of authorization /request letters whenever needed. Import license of RailTel can be used for materials procured under high sea sale.

31.0 Fall Back Clause:

The order/contract, if and when placed, will be subject to following Fall **Back** Clause:-

31.1 The price quoted by the supplier should not be higher than the maximum price, if any, for the materials and the same shall not be higher than the price usually charged by the supplier for materials of the same nature, class or description to any other purchaser.

- 31.2 The price charged for the materials supplied under the order/contract by the supplier shall in no event exceed the lowest price at which the supplier sells the materials of identical description to any other person during the period till performance of all supply orders placed during the currency of the contract is completed. If at any time during the period the supplier reduces the sale price of such materials or sells such materials to any other person including his dealers at a price lower than the price chargeable under the contract, he shall forthwith notify such reduction or sale to the purchase and the price payable under the contract for these materials supplied after the date of coming into force of such reduction or sale shall stand correspondingly reduced.
- 31.3 If it is discovered that the supplier has contravened the above conditions, then without prejudice to any other action which might be taken against him, it shall be lawful for the purchaser to terminate the order/contract and purchase the materials at the risk and cost of the supplier and in that event the provision of General Conditions of tender shall, as far as possible, be applicable or recover the loss.
- 31.4 The Contractor shall furnish the following certificate to the concerned Account Officer along with each bill for payment of supplies made against the order/contract:

"I/We certify that there has been no reduction in sale price of the stores of description identical to the stores supplied to the Government under the contract herein and such stores have not been offered/sold by me/us to any person /organization including the purchaser or any Department of Central Government or any Railway Office or any Railway Undertaking as the case may be up to the date of bill/the date of completion of supplies against all supply orders placed during the currency of the order/contract at a price lower than the price charged to the RailTel, Northern Region, under the contract."



Chapter IV

Form-1

GUARANTEE BOND FOR SECURITY DEPOSIT

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

1. In consideration of the RailTel Corporation of India Limited, registered & regional office
at 6th floor, Block-III, Delhi IT Park, Shastri Park, Delhi-110053 (hereinafter called "the
RailTel") having agreed to exempt (M/s. Party Name and
Address) (hereinafter called "
the said Contractor(s)") from the demand, under the terms and conditions of an Agreement No.
(LOA/PO No.) Dated(LOA/PO date) made between
called "the said Agreement") of Security Deposit for the due fulfillment by the said
contractor(s)) of the terms and conditions contained in the said Agreement, or production of a
Bank Guarantee for Rs (Rs Only). We,(Bank
Name and Address) hereinafter referred to as "the Bank") at the request of
Contractor(s) do hereby undertake to pay the RailTel an amount not exceeding Rs
Against any loss or damage caused to or suffered or would be caused to or suffered by the
RailTel by reason of any breach by the said Contractor(s) of any of the terms or conditions
contained in the said PO/Agreement.
2. We,
Address) do hereby undertake to pay the amount due and payable under this Guarantee without
any demur, merely on demand from the RailTel stating that the amount is claimed is due by way
of loss or damage caused to or would be caused to or suffered by the RailTel by reason of breach
by the said Contractor(s) of any of terms or conditions contained in the said Agreement or by
reason of the Contractor(s) failure to perform the said PO/Agreement. Any such demand made
on the Bank shall be conclusive as regards the amount due and payable by the Bank under this
guarantee. However, our liability under this guarantee shall be restricted to an amount not
exceeding Rs
3. We,
to pay to the RailTel any money so demanded notwithstanding any dispute or disputes raised by
the Contractor(s) / Supplier(s) in any suit or proceedings pending before any court or Tribunal
relating thereto our liability under this present being, absolute and unequivocal.
The Payment so made by us under this Bond shall be a valid discharge of our liability for
payment thereunder and the Contractor(s) / Supplier(s) shall have no claim against us for making

agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said PO/Agreement and that it shall continue to be enforceable till all the dues of the RailTel under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till RailTel certifies that the terms and

We, Bank (Bank Name and Address) further

such payment.

RailTel/OT/NR/CHEMICAL (GEL) EARHTING/15-16/15

Contra Guara discha 5. the R affecti Agree exerciterms liabilition for bear Contra would 6. or the 7. under the Ra 8. Our lia This E we are	the RailTel that the RailTel shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the Agreement or to extend time of to postpone for any time or from time to time any of the powers exercisable by the RailTel against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension to the said Contractor(s) or for any forbearance, act or omission on the part of RailTel or any indulgence by the RailTel to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have affect of so relieving us. 6. This Guarantee will not be discharged due to the change in the Constitution of the Bank or the Contractor(s) Supplier(s). 7. We,				
		Dated the	doy of	2016	
		Dated the			
			Indicate the name of th		
Witne	ess				
1.	Signature				
	Name				
2.	Signature				
	Name				

CHAPTER V

Technical Specifications

- 1. All the Earthing materials should be supplied by the contractor.
- 2. The value of the earth should be less than 5 ohms.
- 3. The outer dia of 100 micron G.I. electrode shall be 60 mm and inner dia of electrode shall be 30 mm filled with CCM compound (Anti Corrosive Conductive Compound) as per drawing attached
- **4.** The length of the outer electrode and inner electrode shall be 2000mm as per drawing attached.
- **5.** The maximum surface area of the electrode shall be 314000 sqmm.
- 6. BFC (Backfill) compound which is highly hygroscopic in nature shall be used. The quantity of backfilling compound shall be 40 kg for each earthing arrangement.
- 7. Approx. 50 mtr. 10 sqmm copper cable shall be used from electrode to earth strip (copper) for the connectivity between electrode and earth strip
- 8. 10 sq mm copper cable shall be used to connect the equipments i.e. IT & Non IT from earth strip to rack and 10 sq mm cable should be supplied as per site requirement.
- **9.** A manhole cover of 450X50 mm shall be provided as a top cover of electrode and value of earth to be written on it with date of measurement.
- **10.** All wirings shall be in flexible conduit pipe and properly routed/dressed.
- **11.** All equipment required for joint measurement of the earth shall be arranged by the firm.
- 12. The earth will be warranted for 5 years and any defect will be repaired/rectified by the firm free of cost except wire theft & damage, if occurs.



Chapter VI

List of Address for Specification

6.0 Address from where specification copy can be purchased:

The copy of IRS, RDSO, TEC and BIS specification used in the tender documents can be purchased from following sources:

6.1 IRS Specification : i) Manager Publications, Government of India

Civil Lines, New Delhi- 110054

- ii) Government of India Book Depot,8 S.K. Roy Road, Calcutta 700001
- 6.2 RDSO Specification:

RDSO, Manak Nagar, Lucknow

6.3 DOT/TEC/ITD Specification:

Khurshid Lal Bhavan, Janpath, New Delhi- 110001

- 6.4 B.I.S. Specification:
- Directorate General ,
 Indian Standards Institution,
 9- Bahadur Shah Zafar Marg,
 New Delhi -110002
- F- block, Unity Building, Narsimhraja Square, Bangalore- 560002
- 534- Sardar Vallabh Bhai Patel Raod , Mumbai.
- 5- Choweringhee Approach, PO Princep street, Calcutta- 700072
- Ahinsa Building (1st floor), SCO 82-83, Sector 27-C, Chandigarh- 160017
- 5-8-56/57, L.N. Gupta Marg, Hyderabad- 208005.
- 117/418-B, Sarvoday Nagar, Kanpur 208005
- C.I.T. Campus, Adyar, Madras 600020.

6.5 The specifications and drawings referred but not enclosed in the tender documents may be seen in the RCIL's office on any working day.

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ANNEXURE-I

Details of Various Locations at BNMC (Block Network Management Centre), DNMC (District Network Management Centre) & SNMC (State Network Management Centre) of Haryana & Chandigarh where Ring Earthing arrangement are required to be installed:-

SI. No.	Dist	Site Name	
1	Sirsa	DNMC	
2	Sirsa	SDM Ellenabad	
3	Sirsa	BNMC Kalanwali	
4	Sirsa	BNMC Nathusari	
5	Sirsa	BNMC CDLU	
6	Sirsa	BNMC Rania	
7	Sirsa	BNMC Odhan	
8	Sirsa	BNMC Baragudha	
9	Sirsa	BNMC Dabwali	
10	Narnaul	DNMC	
11	Narnaul	SDM Mahendergarh	
12	Narnaul	BNMC Ateli	
13	Narnaul	BNMC Nagal Chaudhary	
14	Narnaul	BNMC Kanina	
15	Hissar	CCS University	
16	Hissar	BNMC Agroha	
17	Hissar	BNMC Uklana	
18	Hissar	Naib Tehsil Bass	
19	Hissar	BNMC Adampur	
20	Hissar	Balasmad School	
21	Hissar	BNMC Barwala	
22	Hissar	BNMC GJU	
23	Hissar	BNMC Hansi	
24	Hissar	BNMC Narnaud	
25	Kaithal	DNMC	
26	Kaithal	BNMC Siwan	

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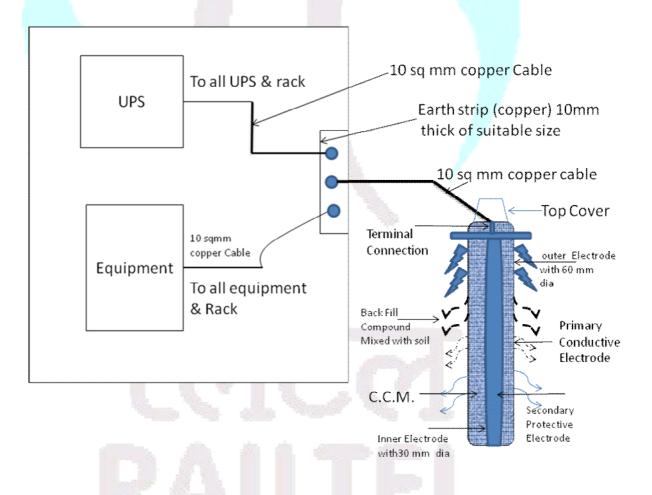
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71	Yamunanagar	BNMC Jaghadari
72	Yamunanagar	BNMC Radaur
73	Panipat	DNMC
74	Panipat	BNMC Matlauda
75	Panipat	BNMC Bapoli
76	Panipat	SDM .Samalkha
77	Panipat	BNMC Israna
78	Rohtak	BNMC Lakhanmajara
79	Rohtak	BNMC Kalanour
80	Rohtak	BNMC Meham
81	Karnal	BDPO Kunjpura
82	Karnal	BDPO Gharonda
83	Karnal	BDPO Indri
84	Karnal	Tehsil Ballha
85	Karnal	BDPO Nissing
86	Gurgaon	BDPO Sohna
87	Gurgaon	Central Jail Bhondasi
88	Faridabad	DNMC
89	Faridabad	BNMC Chhainsa
90	Faridabad	SDM Ballabhgarh
91	Faridabad	MC Faridabad
92	Sonipat	BNMC Kharkhoda
93	Sonipat	BNMC Kathura
94	Sonipat	SDM Gohana
95	Sonipat	BNMC Rai
96	Sonipat	BNMC Bhanswola Univ
97	Jind	BNMC Safidon
98	Jind	BNMC Alewa
99	Jind	BNMC Pilukheda
100	Jind	BNMC Julena
101	Hissar	DNMC
102	Faridabad	BNMC Hodal
103	Faridabad	BNMC Hassanpur
104	Fatehabad	DNMC
105	Fatehabad	BNMC Bhatukalan
106	Fatehabad	MC Dharsul
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107	Fatehabad	BNMC Bhuna
108	Fatehabad **	SDM Ratia
109	Faridabad	BNMC Jhakhal
110	Jhajjar	SDM Bahadurgarh
111	Jhajjar	BNMC Mattanhail
112	Mewat	BNMC Punhana
113	Mewat	SDM Hathin
114	Mewat	BNMC Nagina
115	Mewat	BNMC Tauru



Annexure-II

Drawing of Maintenance free Chemical (Gel) Earthing



Note:

- 1. All the Earthing materials should be supplied by the contractor.
- **2.** The value of the earth should be less than 5 ohms.