

CENTRAL RAILWAY	
	
NAGPUR DIVISION	
SIGNAL AND TELECOMMUNICATION DEPARTMENT	
e-Tender No.	52-2023-NGP-SNT-T-DATACOM Dt: 02.11.2023
Type of Tender	Open Tender.
Name of Work:	Supply, installation, testing & commissioning of the Replacement of various overaged Data-com equipment for FOIS networks at different locations and augmentation of associated E-module applications like HRMS, UMID, UDM etc. at various locations of Nagpur Division of Central Railway.
Cost of Work:	Rs. 2,94,17,575.53/-
Scope of work in brief:	Clause No. 2.0.2
Eligibility Of The Bidder and Similar single work	Clause No. 1.1.3 (Refer Chapter I Of Tender Document)
Tender Closing Date:	24.11.2023
Tender Closing Time:	15:00 Hrs
Tender Opening Time:	15:15 Hrs
Validity of offers:	60 Days from date of opening of tender.
Cost Of Tender Document:	Rs. 0.00 (e-Tender)
Bid Security Deposit (EMD):	Rs. 2,97,100.00/-
Completion Period:	09 (Nine) Months From Issue Of LOA
Store Consignee:	SSE(Tele) AJNI
Work Execution Consignee:	SSE (Tele) NAGPUR, AMLA, AJNI, WARDHA & WARORA
Warranty Period:	One Year After Commissioning Date.
Maintenance Period:	One Year After End of Warranty Period .
GGC Applicable:	GCC April 2022 or latest and all corrigenda.
	Note - All the bidders/ tenderers should ensure that they are GST complaint and their quoted tax structure / rates are as per GST LAW

CHAPTER – I

Instructions to Tenderers

1.0	<u>TENDER NOTICE:</u>
	52-2023-NGP-SNT-T-DATACOM Dt: 02.11.2023
	Divisional Railway Manager (S&T), Central Railway, Nagpur for and on behalf of President of India, invites Open E-tender through website https://www.ireps.gov.in for following work:
	The prospective tenderers are requested to visit the website https://www.ireps.gov.in for all the details of tender from time to time before the date of closing for submission of tender to note any changes / updates / corrigenda, if any.
	Tenderer should participate electronically only in above E-tender through website https://www.ireps.gov.in & submission of manual offers against E-tender is not allowed. Manual offers, if submitted shall neither be opened nor be considered.
	The bidders will have to make payment towards Bid Security / Earnest Money Deposit (EMD) & Tender Document Cost (TDC) against E-tenders through online payment (Payment Gateway) modes like net banking, debit/credit cards etc. available on website https://www.ireps.gov.in portal.
	For any enquiry, may contact at our office address – Senior Divisional Signalling & Telecommunication Engineer (Sr. DSTE), 2nd Floor, DRM Office, Kingsway Road, Opposite SBI Main Branch, Central Railway, Nagpur-440001. Maharashtra
1.1	<u>ELIGIBILITY CRITERIA:</u> The Tenderer(s) shall necessarily satisfy the eligibility conditions as listed below on the date of closing of tender (closing date for submitting the offer). Please note that these eligibility criteria will be applicable for tenders having advertised cost of work <u>more than Rs. 50.00 lakhs.</u>
1.1.1	Technical Eligibility Criteria:
1.1.1.a	(a) The tenderer must have successfully completed or substantially completed any one of the following categories of work(s) during last 07 (seven) years, ending last day of month previous to the one in which tender is invited: GCC April 2022 (i) Three similar works each costing not less than the amount equal to 30% of advertised value of the tender, or (ii) Two similar works each costing not less than the amount equal to 40% of advertised value of the tender, or (iii) One similar work costing not less than the amount equal to 60% of advertised value of the tender. (b) (1) In case of tenders for composite works (e.g. works involving more than one distinct component, such as Civil Engineering works, S&T works, Electrical works, OHE works etc. and in the case of major bridges – substructure, superstructure etc.), tenderer must have successfully completed or substantially completed any one of the following categories of work(s) during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:

	(i) Three similar works each costing not less than the amount equal to 30% of advertised value of each component of tender, or (ii) Two similar works each costing not less than the amount equal to 40% of advertised value of each component of tender, or (iii) One similar work each costing not less than the amount equal to 60% of advertised value of each component of tender. Note for b(1): Separate completed works of minimum required values shall also be considered for fulfilment of technical eligibility criteria for different components. (b)(2): In such cases, what constitutes a component in a composite work shall be clearly pre-defined with estimated tender cost of it, as part of the tender documents without any ambiguity. (b)(3): To evaluate the technical eligibility of tenderer, only components of work as stipulated in tender documents for evaluation of technical eligibility, shall be considered. The scope of work covered in other remaining components shall be either executed by tenderer himself if he has work experience as mentioned in clause 7 of the Standard General Conditions of Contractor through subcontractor fulfilling the requirements as per clause 7 of the Standard General Conditions of Contract or jointly i.e., partly himself and remaining through subcontractor, with prior approval of Chief Engineer in writing. However, if required in tender documents by way of Special Conditions, a formal agreement duly notarised, legally enforceable in the court of law, shall be executed by the main contractor with the subcontractor for the component(s) of work proposed to be executed by the subcontractor(s), and shall be submitted along with the offer for considering subletting of that scope of work towards fulfilment of technical eligibility. Such subcontractor must fulfil technical eligibility criteria as follows: The subcontractor shall have successfully completed at least one work similar to work proposed for subcontract, costing not less than 35% value of work to be subletted, in last 5 years, ending last day of month previous to the one in which tender is invited through a works contract. Note: for subletting of work costing up to Rs 50 lakh, no previous work experience of subcontractor shall be asked for by the Railway. GCC April 2022 In case after award of contract or during execution of work it becomes necessary for contractor to change subcontractor, the same shall be done with subcontractor(s) fulfilling the requirements as per clause 7 of the Standard General Conditions of Contract, with prior approval of Chief Engineer in writing. Note for Item 10.1: Work experience certificate from private individual shall not be considered. However, in addition to work experience certificates issued by any Govt. Organisation, work experience certificate issued by Public listed company having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at least 5 years prior to the date of closing of tender, shall also be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such certificates. In case tenderer submits work experience certificate issued by public listed company, the tenderer shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate.
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1.1. 1.b	Financial Eligibility Criteria: GCC APRIL-2022 10.2. Financial Eligibility Criteria: The tenderer must have minimum average annual contractual turnover of V/N or 'V' whichever is less; where V= Advertised value of the tender in crores of Rupees. N= Number of years prescribed for completion of work for which bids have been invited. The average annual contractual turnover shall be calculated as an average of "total contractual payments" in the previous three financial years, as per the audited balance sheet. However, in case balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover. The tenderers shall submit requisite information as per Annexure-VIB, along with copies of Audited Balance Sheets duly certified by the Chartered Accountant/ Certificate from Chartered Accountant duly supported by Audited Balance Sheet.
1.1.2	Explanation for clause No.1.1.1a & 1.1.1b - Eligibility Criteria:
1.	In case a work is started prior to 07 (seven) years , ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfilment of credentials.
2.	If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for fulfilment of credentials.
3.	If a part or a component of work is completed but the overall scope of contract is not completed, this work shall not be considered for fulfilment of technical credentials even if the cost of part completed work/component is more than required for fulfilment of credentials.
4.	In case a work is considered similar in nature for fulfilment of technical credentials, the overall cost of that work including PVC amount if any shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.
5.	The value of final bill including PVC amount-if paid, or otherwise in case final bill is pending the contract cost in last approved variation statement plus PVC amount paid or cumulative amount paid up to last on-account bill including PVC amount and statutory deductions whichever is less, shall be considered as the completion cost of work.
6.	In case of newly formed partnership firm, the credentials of individual partners from previous propriety firm(s) or dissolved previous partnership firm(s) or split previous partnership firm(s), shall be considered only to the extent of their share in previous entity on the date of dissolution / split and their share in newly formed partnership firm. For example, a partner A had 30% share in previous entity and his share in present partnership firm is 20%. In the present tender under consideration, the credentials of partner A will be considered to the extent of 0.3×0.2 value of the work done in the previous entity. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include

		copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.
	7.	In case of existing partnership firm, if any one or more partners quit the partnership firm, the credentials of remaining partnership firm shall be re-worked out i.e., the quitting partner(s) shall take away his credentials to the extent of his share on the date of quitting the partnership firm (e.g. in a partnership firm of partners A, B & C having share 30%, 30% & 40% respectively and credentials of Rs. 10 crores; in case partner C quits the firm, the credentials of this partnership firm shall remain as Rs.6 crore). For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deed(s), dissolution deed(s) and proof of surrender of PAN No.(s) in case of dissolution of partnership firm(s) etc.
	8.	In case of existing partnership firm if any other partner(s) joins the firm, the credentials of partnership firm shall get enhanced to the extent of credentials of newly added partner(s) on the same principles as mentioned in item 6 above. For this purpose, the tenderer shall submit along with his bid all the relevant documents which include copy of previous partnership deeds, dissolution/splitting deeds and proof of surrender of PAN No.(s) in case of dissolution of partnership firm etc.
	9.	Any partner in a partnership firm cannot use or claim his credentials in any other firm without leaving the partnership firm i.e., In a partnership firm of A&B partners, A or B partner cannot use credentials of partnership firm of A&B partners in any other partnership firm or propriety firm without leaving partnership firm of A&B partners.
	10.	In case a partner in a partnership firm is replaced due to succession as per succession law, the proportion of credentials of the previous partner will be passed on to the successor.
	11.	If the percentage share among partners of a partnership firm is changed, but the partners remain the same, the credentials of the firm before such modification in the share will continue to be considered for the firm as it is without any change in their value. Further, in case a partner of partnership firm retires without taking away any credentials from the firm, the credentials of partnership firm shall remain the same as it is without any change in their value.
	12.	In a partnership firm "AB" of A&B partners, in case A also works as propriety firm "P" or partner in some other partnership firm "AX", credentials of A in propriety firm "P" or in other partnership firm "AX" earned after the date of becoming a partner of the firm AB shall not be added in partnership firm AB.
	13.	In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.
	14.	In case company A is merged with company B, then company B would get the credentials of company A also.
1.1.3		<u>The similar single work means:</u>
***		Any Telecom work in which the work of supply, installation, testing and commissioning of STM, PD-MUX, NMS are included.
1.2		<u>Tenderer Credentials:</u> Documents testifying tenderer previous experience and financial status should be produced along with the tender.

		Tenderer(s) who is / are not borne on the approved list of the Contractors of _____ Railway shall submit along with his / their tender:
	(i)	Certificates and testimonials regarding contracting experience for the type of job for which tender is invited with list of works carried out in the past.
	(ii)	Certificates which may be an attested Certificate from the client, Audited Balance Sheet duly certified by the Chartered Accountant etc. regarding contractual payments received in the past.
	(iii)	The list of personnel / organization on hand and proposed to be engaged for the tendered work. Similarly list of Plant & Machinery available on hand and proposed to be inducted and hired for the tendered work.
	(iv)	A copy of certificate stating that they are not liable to be disqualified and all their statements/documents submitted along with bid are true and factual. Standard format of the certificate to be submitted by the bidder is enclosed as <u>Annexure-VI (In Chapter-V)</u>. <u>Non submission of a copy of certificate by the bidder shall result in summarily rejection of his/their bid.</u> It shall be mandatorily incumbent upon the tenderer to identify state and submit the supporting documents duly self-attested by which they/he are/is qualifying the Qualifying Criteria mentioned in the Tender Document.
	(v)	The Railway reserves the right to verify all statements, information and documents submitted by the bidder in his tender offer, and the bidder shall, when so required by the Railway, 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 Railway shall not relieve the bidder of its obligations or liabilities hereunder nor will it affect any rights of the Railway there under.
	(vi)	(a) In case of any information submitted by tenderer is found to be false, forged or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the tender Bid Security besides banning of business for a period of up to two years. (b) In case of any information submitted by tenderer is found to be false forged or incorrect after the award of contract, the contract shall be terminated. Bid Security, Performance Guarantee and Security Deposit available with the railway shall be forfeited. In addition, other dues of the contractor, if any, under this contract shall be forfeited and agency shall be banned for doing business for a period of up to two years.
1.3		Non-compliance with any of the conditions set forth therein above is liable to result in the tender being rejected.
1.4		Documents to be submitted along with tender:
	(i)	The tenderer shall clearly specify whether the tender is submitted on his own (Proprietary Firm) or on behalf of a Partnership Firm / Company / Joint Venture (JV) / Registered Society / Registered Trust / HUF etc. The tenderer(s) shall enclose the attested copies of the constitution of their concern, and copy of PAN Card along with their tender. Tender Documents in such cases are to be signed by such

		persons as may be legally competent to sign them on behalf of the firm, company, association, trust or society, as the case may be.
	(ii)	Following documents shall be submitted by the tenderer: (a) Sole Proprietorship Firm: (i) An undertaking that he is not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of opening of bids, either in individual capacity or as a member of the partnership firm or JV in which he was / is a partner/member. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the General Conditions of Contract. (ii) All other documents in terms of explanatory notes in clause no.1.1.1 above. (iii) All documents in terms of Para 10 of the Tender Form (Second Sheet) as per GCC April-2022 with latest amendment/corrigenda. (iv) All other documents in as per GCC April-022 with latest amendment/corrigenda (b) HUF: (i) A copy of notarized affidavit on Stamp Paper declaring that he who is submitting the tender on behalf of HUF is in the position of 'Karta' of Hindu Undivided Family (HUF) and he has the authority, power and consent given by other members to act on behalf of HUF. (ii) An undertaking that the HUF is not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of opening of bids, either in individual capacity or as a member of the partnership firm or JV in which HUF was / is a partner/member. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the General Conditions of Contract. (iii) All other documents in terms of explanatory notes in Clause No.1.1.1 above. (iv) All other documents in as per GCC April-2022 with latest amendment/corrigenda (c) Partnership Firm: (i) The tenderer shall submit documents as mentioned in Clause No.18 of the Tender Form (Second Sheet) of Part-I of GCC April-2022. (d) Joint Venture (JV): (i) The tenderer shall submit documents as mentioned in Clause No.17 of the Tender Form (Second Sheet) of Part-I of GCC April-2022. (e) Company registered under Companies Act-2013: (i) The copies of MOA (Memorandum of Association) / AOA (Articles of Association) of the company. (ii) A copy of Certificate of Incorporation. (iii) A copy of Authorization/Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual to sign the tender on behalf of the company and create liability against the company. (iv) An undertaking that the Company is not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of opening of bids, either in individual capacity or as a member of the partnership firm or JV in

		which the Company was / is a partner/member. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the General Conditions of Contract. (v) All other documents in terms of explanatory notes in clause no.1.1 above. (vi) All other documents in terms of para 10 of tender form (second sheet) as per GCC April- 2022 with latest amendment/corrigenda (f) LLP (Limited Liability Partnership) Firm: If the tender is submitted on behalf of a LLP registered under LLP Act-2008, the tenderer shall submit along with the tender: (i) A copy of LLP Agreement. (ii) A copy of Certificate of Incorporation. (iii) A copy of Power of Attorney/Authorization issued by the LLP in favour of the individual to sign the tender on behalf of the LLP and create liability against the LLP. (iv) An undertaking that the LLP is not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of opening of bids, either in individual capacity or as a member of JV in which the LLP was / is a member. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the General Conditions of Contract. (vii) All other documents in terms of explanatory notes in clause no.1.1 above. (viii) All other documents in terms of para 10 of tender form (second sheet) as per GCC April-2022 with latest amendment/corrigenda (g) Registered Society & Registered Trust: The tenderer shall submit: (i) A copy of the Certificate of Registration. (ii) A copy of Deed of Formation. (iii) A copy of Power of Attorney in favour of the individual to sign the tender documents and create liability against the Society/Trust. (iv) All other documents in terms of explanatory notes in clause no.1.1 above. (v) All other documents in terms of para 10 of tender form (second sheet) as per GCC April-2022 with latest amendment/corrigenda
	(iii)	If it is NOT mentioned in the submitted tender that tender is being submitted on behalf of a Sole Proprietorship firm / Partnership firm / Joint Venture / Registered Company etc., then the tender shall be treated as having been submitted by the individual who has signed the tender.
	(iv)	After opening of the tender, any document pertaining to the constitution of Sole Proprietorship Firm / Partnership Firm / Registered Company/ Registered Trust / Registered Society / HUF etc. shall be neither asked nor considered , if submitted. Further, no suo moto cognizance of any document available in public domain (i.e., on internet etc.) or in Railway's record/office files etc. will be taken for consideration of the tender, if no such mention is available in tender offer submitted.
	(v)	A tender from JV / Partnership firm etc. shall be considered only where permissible as per the tender conditions.

	(vi)	The Railway will not be bound by any change in the composition of the firm made subsequent to the submission of tender. Railway may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor.
1.5		The tenderer whether sole proprietor / a company or a partnership firm / registered society / registered trust / HUF etc. if they want to act through agent or individual partner(s), should submit along with the tender, a copy of power of attorney duly stamped and authenticated by a Notary Public or by Magistrate in favour of the specific person whether he/they be partner(s) of the firm or any other person specifically authorizing him/them to submit the tender, sign the agreement, receive money, co-ordinate measurements through contractor's authorized engineer, witness measurements, sign measurement books, compromise, settle, relinquish any claim(s) preferred by the firm and sign "No Claim Certificate" and refer all or any disputes to arbitration. The above power of attorney shall be submitted even if such specific person is authorized for above purposes through partnership deed / Memorandum of Understanding / Article of Association or such other document, failing which tender is liable to be rejected.
1.6		Employment/Partnership etc. of Retired Railway Employees: The tenderer shall submit documents / information as mentioned in Clause No.16 of the Tender Form (Second Sheet) of Part-I of GCC April- 2022.
1.7		<u>Rules & General Instructions:</u>
	A	The Tender Document includes "Instructions to Tenderers", "Special Conditions of Contract (SCC)", "Technical Specifications & Requirements", "Tender Schedule" and "Annexure / Formats / Drawings, if any" together with any addendum and corrigendum issued. In case of contradiction between Tender conditions, instructions to the Tenderer, the General conditions of the contract and the special conditions of the contract, the latter will prevail.
	B	The submission of the Tender shall be deemed to have been done after careful study and examination of the Tender Document with full understanding of the implications thereof. Any clarifications required by the Tenderer shall be obtained from the Office of the Tender Inviting Authority on any working day during office hours.
	C	The Tenderer should read the conditions/instructions carefully and also see the schedule of works, technical specification etc. before submitting the offer and also ascertain site conditions and the magnitude of works involved.
	D	Conditional tenders will generally not be considered and are liable to be rejected. Railway however reserves the right to reject such tenders summarily without assigning any reasons whatsoever. The Railway also reserves the right to reject any special conditions stipulated by the Tenderer as considered unacceptable to the Railway. Only such special conditions/specifications stipulated by the tenderer/s, which are having nil financial repercussion and which have been specially approved by Railways in writing shall be deemed to have been accepted by the Railways and shall form part of the contract agreement. The tenderer/s conditions/stipulations which are at variance with the tender conditions/ codal provisions and not approved/accepted by Railways, shall be withdrawn by the tenderer/s.
	E	If it is found at any stage of the finalization of the tender or during actual execution of the work that the information furnished in this tender including

		clarification, is incorrect, the tenders are likely to be rejected. The Railway reserves the right to cancel the tender without assigning any reason.
	F	All the relevant documents shall be uploaded online in the space provided along with tender form as per terms and condition of tender.
	G	The charges have been fixed at Rs.200/- payable by the tenderer at the time of submitting the Partnership Deed / Power of Attorney / Performance Bank Guarantee for scrutiny and legal advice.
1.8		<u>Local Conditions:</u>
		It will be imperative on each Tenderer to fully acquaint him with all the local conditions and factors, which would have any effect on the performance of the contract and cost of the work. The Railway shall not entertain any request for clarifications from the Tenderer regarding such local conditions. No request for change of price will be entertained after the offer is accepted by the Railway on account of any local condition or factor. The tenderer(s) shall inspect the proposed site of work and acquaint himself/themselves with the site conditions, working hours, layout of land, trees and shrubs that he/they will have to cut, type of strata likely to be met within the borrow pits, stacking space for materials, approach roads, path ways available etc. and all relevant items connected with the execution of the work. No claim shall be entertained for the contractor(s) making his/their own arrangements for approaches/approach road from outside Railway land and contractor(s) will bear entire expenses such as road taxes, payment for right of way, etc. to outsiders and for Construction of approaches/approach roads, etc.
1.9		<u>General Instructions:</u>
	A	No Counter conditions will be accepted to any of the clauses contained in the tender document. Any clause contrary to the Railway's Tender Conditions will be ignored and the offer will be evaluated as though the tenderer has accepted all the Railway's Clauses in TOTO.
	B	Railway's decision in regard to acceptability of Technical Suitability of the offer shall be final.
	C	As far as possible the Tenderer's bid should not have any condition or specification or assumption contrary to the provisions in these tender documents on which the Tenderer/s bid is based. Tenderer's Special conditions, not in conformity with the tender specifications/drawings are required to be listed separately with details of exact financial implications, if any. Railways may not take cognizance of conditions/variations from the tender documents or drawings etc. It needs to be emphasized that only such conditions/stipulations which are at variance with the tender conditions codal provision stipulated in the tender documents need be mentioned, in case Tenderer's choose to stipulate such special conditions taking into account the restrictions mentioned elsewhere in the tender document. Only such special conditions/specifications stipulated by the Tenderer's which have been specifically approved by the Railways in writing shall be deemed to have been accepted by the Railways and shall form part of the Contract Agreement. The Tenderer/s conditions/stipulations which are at variance with the tender conditions/codal provisions and not approved / accepted by Railways shall be withdrawn by the Tenderer/s.
		NOTE: OFFER NOT FULFILLING ABOVE CONDITIONS WILL BE SUMMARILY REJECTED.

1.10		<u>System of Quoting Rates:</u>
	A	The rates quoted for the tender by the Tenderer will be inclusive of all kind of taxes such as excise duty, service tax, sales tax, octroi, interstate tax, works contract tax, transport, loading, other incidental charges, unloading charges etc. or any Tax (after roll out of GST as per provisions made) wherever leviable. Octroi exemption certificates / forms for concessional Sales tax and any other statutory duties shall be issued by the Railway on demand in the name of contractor only, subject to this being permissible under prevailing relevant rules. <u>No additional payment will be made, if the octroi exemption certificate is not honoured by the concerned authorities.</u>
	B	The rates quoted by the Tenderer should be firm and no price variation clause will be acceptable.
	C	For the tenders due to open after roll out of GST – All the bidders / tenderers should ensure that they are GST compliant and their quoted tax structure / rates are as per GST Law.
	D	Tenderers will examine the various provisions of the Central Goods & Services Tax Act, 2017 (CGST) / Integrated Goods & Services Tax Act, 2017 (IGST) / Union Territory Goods & Services Tax Act, 2017 (UTGST) / Respective State's State Goods & Services Tax Act, 2017 (SGST) also, as notified by Central / State Govt. and as amended from time to time and applicable taxes before bidding. Tenderers will ensure that full benefit of Input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates.
	E	The successful tenderer who is liable to be registered under CGST/IGST/UTGST/SGST Act shall submit GSTIN along with other details required under CGST/IGST/UTGST/SGST Act to Railway immediately after the award of contract, without which no payment shall be released to the contractor. The contractor shall be responsible for deposition of applicable GST to the concerned authority.
	F	In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/SGST Act, the Railway shall deduct the applicable GST from his/their bills under Reverse Charge Mechanism (RCM) and deposit the same to the concerned authority.
1.11		<u>Rates during Negotiation:</u>
		The Tenderer/s shall not increase his/their quoted rates in case the Railway Administration negotiate for reduction of rates, such a negotiation shall not amount to cancellation or withdrawal of the original offer and the rates originally quoted will be binding on the Tenderer/s.
1.12		<u>Validity of Offer:</u>
	A	The tenderer shall keep the offer open for a minimum period of 60 days from the date of closing of tender . Within that period, the tenderer cannot withdraw his offer subject to the period being extended further if required by mutual agreement from time to time. Any contravention of the above condition will make the tenderer liable for forfeiture of his Earnest Money Deposit (EMD).
	B	It is understood that after submitting his / their tender subject to the period being extended further if required by mutual agreement from time to time, he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to Railway. Should the Tenderer fail to observe or comply

		with the foregoing stipulation, the amount deposited as Earnest Money (EMD) for the due performance of the above stipulation shall be forfeited by the Railway.
1.13		<u>Closing of Tender submission:</u>
		The tender cannot be submitted, beyond the day and time as described in NIT or as per corrigenda.
1.14		<u>Errors, Omissions & Discrepancies in the tender document:</u>
		Should a tenderer find discrepancies in or omissions from the drawings or any of the Tender Forms or should he be in doubt as to their meaning, he should at once notify the authority inviting tenders. The tender inviting authority may, if deemed necessary, clarify the same to all tenderers. It shall be understood that every endeavour has been made to avoid any error which can materially affect the basis of tender and successful tenderer shall take upon himself and provide for the risk of any error which may subsequently be discovered and shall make no subsequent claim on account thereof.
1.15		<u>Rights of Railway to deal with Tenders:</u>
	(i)	The authority for the acceptance of the tender will rest with the Railway. It shall not be obligatory on the said authority to accept the lowest tender or any other tender, and tenderer(s) shall neither demand any explanation for the cause of rejection of his/ their tender nor the Railway to assign reasons for declining to consider or reject any particular tender or tenders.
	(ii)	If the tenderer(s) deliberately gives / give wrong information in his / their tender or creates / create circumstances for the acceptance of his / their tender, the Railway reserves the right to reject such tender at any stage.
	(iii)	If the tenderer(s) expire(s) after the submission of his / their tender or after the acceptance of his / their offer, the Railway shall deem such tender cancelled. If a partner of a firm expires after the submission of their tender or after the acceptance of their tender, the Railway shall deem such tender as cancelled, unless the firm retains its character.
1.16		<u>Acceptance of Tender, issue of LOA, Submission of Performance BG Bond and commencement of Contract by the successful Tenderer:</u>
		A letter of acceptance (LOA) of the offer shall be issued by the Railway Administration to the successful Tenderer that his offer has been accepted, on receipt of which he shall submit a Performance Guarantee (PG) bond as described in Clause No.2.3 of Chapter-II, Special Conditions of Contract and shall execute a formal Contract Agreement with the President of India acting through the Sr. Divisional Signal and Telecommunication Engineer / Divisional Signal and Telecommunication Engineer, Nagpur Division, Nagpur-440001 for carrying out the work according to terms and conditions of this tender including "General Conditions of Contract" of Railway and "Special Conditions / Specifications of this tender". Upon issuing of LOA the contract for the work shall be deemed to have been awarded to the Tenderer and accordingly the completion period will be reckoned from the date of issue of LOA irrespective of the date of signing of contract agreement subsequently.
1.17		<u>Signing of Contract Agreement:</u>
	A	The successful Tenderer shall be required to present himself or his duly authorized representative at the office of the Senior Divisional Signalling & Telecommunication Engineer, 2nd Floor, DRM Office, Kingsway road,

		Near SBI Main Branch, Central Railway, Nagpur-440001. to execute the aforesaid Contract Agreement, within 15 days after receipt of notice that the said documents are ready.
	B	Failure to do so shall constitute a breach of the agreement effected by the acceptance of the Tender in which case, the Railway may determine that such Tenderer/s has/have abandoned the contract and there upon his/their tender and the acceptance thereof shall be treated as cancelled and the Railway shall be entitled to forfeit the full amount of the earnest money and to recover the liquidated damages for such default, without prejudice to any other rights or remedies.
1.18		Commencement of work by Submission of Programme for execution:
	A	The successful tenderer upon receipt of LOA shall commence the work by way of submitting a detailed time schedule for completion of work within the allowed completion period.
	B	The Contractor shall have a competent project team with adequate resources to execute the work so that the entire work is completed within the completion period.
	C	The Contractor is expected to have worked out a tentative programme for execution of the work well before issue of "Letter of Acceptance", by Railway. Within 15 days of the date of issue of the LOA, contractor shall commence the work by way of submitting a <i>Detailed Time and Activity Schedule</i> for the execution of work aiming at completing the entire work within the stipulated completion time. The schedule shall thereafter be approved by the Engineer-In-Charge normally within 5 working days.
	D	Railway reserves the right to modify the activity schedule while approving the same as well as at any stage during execution if situation so warrants. Once approved, in the event of any slippage from the time schedule especially when resulting into time over-run of the work the contractor shall submit revised schedule duly justifying the circumstances without any delay. The revised schedule shall be approved by the Engineer-In-Charge only when considered justified in his opinion otherwise it will attract penal action on the contractor as per provision of this contract.
1.19		<u>CHANGE IN ADDRESS:</u>
		Any change in the address of the contractor shall be forthwith intimated in writing to the Railway. The Railway will not be responsible for any loss/ inconvenience suffered by the Contractor on account of his failure to comply with this.

End Of Chapter-I

CHAPTER – II

SPECIAL CONDITIONS OF CONTRACT

Special conditions are to be read along with following important instructions/conditions and General Conditions of Contract (GCC) and any amendments / corrigenda.

2.0	<u>SPECIAL CONDITIONS OF CONTRACT:</u>	
	2.0.1	This tender is for: Telecommunication work related to Supply, installation, testing & commissioning of the Replacement of various overaged Data-com equipment for FOIS networks at different locations and augmentation of associated E-module applications like HRMS, UMID, UDM etc. at various locations of Nagpur Division of Central Railway” for the commissioning of Routers for UTS / FOIS locations and OLTE, ONT/ONU Based FTTH communication system in Nagpur Division of Central Railway.
	2.0.2	Brief Scope of work:
		<u>MANDATORY NOTE:</u> All the RDSO specified materials / items, to be supplied from RDSO approved firms only and to comply with RDSO specifications.
		Complete survey of the station for identification of location for various equipment. Preparation of drawing mentioning the location of OLTE ONU/ONT Splitter OF Cables etc. etc. and its wiring diagrams showing CAT-6 OFC & Power Cables after survey and submission for approval wherever required. The work should be completed within <u>09 (Nine) months</u> from the date of commencement or from the date of issue of LOA. Fixing of equipment; as per tender schedule and specifications. Equipment will be installed in such a manner that no system/part of it should be susceptible to any damage by miscreants or damaged because of open environment All the equipment are to be supply as per the RDSO/RITES/IS Standards specification mention along with description in tender schedule. Provision of adequate protection of all the Signal & Telecom Equipments/components while during the execution of works. Suitable protection should be taken for the staff and equipments while the work being executed in RE area such as protection earthing, protection from lightning, surge, over voltage etc. All the tools & Measuring Instruments, required for Installation & Testing will have to be brought by the tenderer at his own cost. Survey of cable route and cabling arrangement. Survey for locations for provision of every component required for implementation of work. Survey for requirement of locations for tower /mast. Survey of yard conditions and finalization of day/night vision. The outdoor assets must be provided with vandal proof metal enclosure, mounting and required hardware/software shall be installed.

		8. Supply of various items strictly as per tender schedule of the work complying all technical specifications as well as annexure attached along with tender documents and in consultation with site in-charge	
		9. The various clamps, fixtures and all other required hardware shall be fixed consultation with site in-charge. The power supply cable as well as communication cable shall be laid as per route given by site engineer of Railways with proper fixing along the walls, roof girders etc. The work will be done in consultation with Railway Engineer at site to the entire satisfaction of Railway's in time.	
		10. The contractor will be responsible for free of cost maintenance for all the items supplied by him for a period of <u>12 months from the date of end of warranty period which shall be reckoned from date of commissioning.</u>	
		11. It shall be the responsibility of the contractor to ensure that the entire length of cables is tested before and after laying to ensure that the cable is in healthy condition. This testing should be done in presence of Railways representative at site and certificate jointly signed and submitted.	
		12. All the data of testing should be tabulated in a Performa and handed over to the site engineer.	
		13. The FTTH consists of IP based Servers, softwares, networking components etc. of different make and specifications. Proper linking of various components which are the part of surveillance system should properly be integrated/ linked and work satisfactorily as per the requirement of Railways.	
		14. It shall be possible to integrate the system using existing LAN/WAN infrastructure on optical/any other available back bone network provided by Railways.	
		15. The system shall support TCP/IP networking, Email, HTTP, Samba and other Internet protocols.	
		16. The installation of system includes wall and ceiling mounting hardware, top and bottom mounting points and other accessories required as per site and need to be supplied by contractor.	
		17. The system shall provide secured recording for evidence purposes and user authentication to protect data integrity.	
		18. During the work if cables are provided through walls or through trough made inwall then the contractor shall repair the walls properly. For the work of cabling through walls proper casing and capping is to be provided and in no case cable be left hanging or exposed.	
		19. At crossings through floor/road/platform the contractor shall repair the broken floor/road/platform at his own cost after cable laying is completed.	
		20. All the cables laid in and around proposed location premises as well as in and around area should be properly covered by means of proper casing and capping. In no case cables be left hanging or exposed.	
		21. At all crossings contractor will ensure that work is carried out strictly in presence of Railways representative and no safety measures are interfered.	
		22. All software and hardware items as per schedule in co-ordination must be installed in presence of Railway Engineer at site. The backup CD/DVD/Hard drive should be supply.	
		23. The work includes supply, installation, testing & commissioning of datacom equipments like routers, switches, ONT,OLT, Splitters, Hubs and other items as mentioned in Schedule.	
		24. The work also includes trenching, OFC laying in duct and termination with end equipment like ONT, OLT, Splitters so that FTTH backbone in NGP division is established.	
		25. OFC fibre shall be laid for implementing FTTH technology wherever feasible in Nagpur Division.	

		26. Replacement/dismantling of existing conduits, Routers, Switches, wiring & old MDF/IDF/CT boxes shall be done by contractor and the cost of replacement shall be borne by the contractor. 27. Contractor shall perform Supply, Trenching, laying of telecom cable (PIJF, OFC, power, data, paired, PA cables, etc) in trenches, conduits, platform cutting, road crossing, track crossing etc and wherever required as directed by site engineer. 28. All supply items in the Schedules as desired & required by site engineer shall be wired, installed, tested and commissioned at the desired site location by the contractor. After installation of individual items the entire system shall be tested/commissioned as a whole and should function properly. 29. The contractor shall have to supply all required manuals including system manuals, installation & training manual to be provided in hard copies & soft on CD/DVD/Pen drive. 30. Store Consignee of the work will be SSE/Tele/Ajni. 31. Hardware – Complete details of hardware arrangements, block diagram, circuit diagram should be supplied by the contractor in three copies. 32. Software - Complete details of software including password added at different stage of software should be supplied by the contractor in three copies. 33. The control communication & other system should not get affected while shifting and installation of telecom equipment's. While shifting of telecom assets utmost care should be taken so that equipment's are not damaged. 34. Preparation of cable route diagram after survey of existing cable route & submission for approval, wherever required. 35. Transportation of material from consignee depot to work site which include loading and unloading of materials at contractors cost. 36. Meggering & Jointing of telecom cable jointly with railway officials & submission of report. Meggered value shall meet the requirement as per C.Rly norms. 37. Execution of work shall be as per RDSO / Central Railway policy, specification and norms only. 38. Work will be executed in coordination with engineering department as and when required in the specified location. 39. Sufficient Manpower will be arranged by contractor for monitoring and execution of work as per site demands and the manpower so arranged shall fulfil the target dates and progress in timely manner. 40. Excavation of Cable Trench / Track Crossing / Road Crossing to the depth 1.2 meter (1 mtrs for PIJF cable) until and otherwise approved by site engineer or as per mentioned in the schedule. Whenever the dimensions of cable trenches as mentioned in the tender schedule are not easily achievable due to terrain conditions, then payment will be made on a pro-rate basis, for the dimensions achieved. The specific approval of the Sr. Divisional Signal and Telecom Engineer will be required for such dispensation. 41. Testing and commissioning: Contractor and Railway representative will jointly test all equipment and perform functional test. 42. Material which is to be supplied by railway, the material will be supplied from SSE(Tele)Ajni The transportation of material including loading and unloading to be borne by contractor. 43. The work will be carried out as per the standard practice, guidelines of Central Railway and instructions of Railway Officials. 44. Contractor must deploy experienced supervisors who have already carried out such works in the part so that Railway Safety norms are taken care. 45. Any other item railway representative desires as per site requirement will have to be carried out by contractor.
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		46. Cutting of platform should be done with marble cutting machine in proper manner and restore the same as before in such a manner that aesthetic of the platform is not disturbed. 47. No hanging/loose wiring should be there. 48. Casing capping/conduit should be fixed in a proper and good looking manner in the indoor or outdoor wiring as per the instruction of site engineer. 49. The contractor shall not execute the work that may interfere with the train traffic until adequate protection has been arranged or as per the instruction of site engineer. 50. Contractor will be himself responsible for safety of his personnel during execution of work. Railway will not be responsible for making payment for any type of compensation. 51. Railway reserves the right to reject any material supplied by the contractor if found not confirming to the specifications. 52. The contractor/OEM shall maintain and provide the service free of cost for a period upto warranty period under which the equipment shall also be guaranteed towards any defects in workmanship and material during the period. 53. All the material supplied by contractor or railway should be transported at site free of cost by the contractor. 54. The contractor will have to train at least 2 nos. of SSE/JE and 2 nos. of maintainers of Railway free of cost for operation & maintenance of the system. They should be explained complete wiring diagram, technical specification of equipment used, trouble shooting of fault etc. 55. All the items to be supplied or to be installed shall be confirming to the relevant RDSO specifications mentioned in the schedule. The execution part shall also confirm to the relevant RDSO specs. 56. RDSO specification material should be procured from RDSO approved firms only, if RDSO approved firms are available. 57. GCC applicable – GCC April 2022 with latest amendments/Corrigenda 58. Material which is to be supplied by railway, the material will be supplied from SSE(Tele)Ajni. The transportation of material including loading and unloading to be borne by contractor.	
		59. The work will be carried out as per the standard practice, guidelines of Central Railway and instructions of Railway Officials.	
		60. <u>INSURANCE OF MATERIALS:</u> 61. The contractor shall arrange insurance of all materials supplied to/by till the time of handing over to the Railway, the completed works against all the risks and losses due to theft, fire or natural calamities. Only Indian Insurance shall be employed.	
		Note – 1. The work is to be carried out in co-ordination with Railway's representatives (S&T and other departments). System Design i. Design of NMS/EMS software modules, including Hardware & software, reporting formats, Submission of complete design documents along with detailed drawings and specifications.	
	2.0.3	List Of Locations For Replacement Of Routers: Refer Annexure	
	2.0.4	The Tender shall be governed by the following Special Conditions of Contract (SCC) and Technical specifications etc. (Chapter-III & IV) in addition to the Standard General Conditions of Contract of Railway (hereinafter called as GCC although meant for civil engineering works but will also be applicable to this work) with later amendments. Where there is any conflict between the instructions	

		to Tenderer, conditions of tendering, special condition of contract, Tender forms, Annexure etc. on one hand and GCC on the other, the former (SCC) shall prevail. Indian Railways Standard General Conditions of Contract issued by Railway Board & any subsequent modifications in GCC issued by Railway Board shall be applicable which are enclosed herewith the Tender.
	2.0.5	Any Special conditions stated by the Tenderer in the covering letter submitted along with the tender shall be deemed to be part of the Contract to such extent only as have been explicitly accepted by the Railway.
	2.0.6	These specifications / documents describe the material to be supplied, work to be Performed and the method of construction, for the complete installation in strict accordance with the drawings and specifications mentioned here and such instructions as may from time to time be given by the Railway. The contractor shall quote for the work giving all information after close scrutiny of the plans/ drawings and site survey. If contractor finds that some drawing/specification is missing from the tender document it shall point out immediately before the opening date of the tender. If this issue is raised after signing of the contract then Railways' decision shall be final about the drawings/ specifications for material and execution.
2.1		<u>Bid Security / Earnest Money Deposit:</u>
	A	The requisite Earnest Money (EMD)/Bid Security as specified in Tender Notice/E-NIT as per GCC will have to be deposited by the Tenderer with his tender offer at the time submission of his/their bid. The bidders will have to make payment towards Earnest Money Deposit (EMD))/Bid Security against E-tender through online payment (Payment Gateway) modes like net banking, debit/credit cards etc. available on website https://www.ireps.gov.in portal as per new policy.
2.2	A	<u>Security Deposit:</u>
	1	The Earnest Money)/Bid Security deposited by the Contractor with his tender will be retained by the Railways as part of security for the due and faithful fulfilment of the contract by the Contractor. The Security Deposit shall be 5% of the contract value . Security Deposit may be deposited by the Contractor before release of first on account bill in cash or Term Deposit Receipt issued from Scheduled Bank, or may be recovered at the rate of 6% of the bill amount till the full Security Deposit is recovered . Provided also that in case of defaulting Contractor, the Railway may retain any amount due for payment to the Contractor on the pending "on account bills" so that the amounts so retained (including amount guaranteed through Performance Guarantee) may not exceed 10% of the total value of the contract.
	2	Further, in case of contracts having value equal to or more than ₹50 Crore (Rs. Fifty crore) the Security Deposit may be deposited as Bank Guarantee Bond also, issued by a scheduled bank after execution of contract documents, but before payment of 1 st on account bill. Provided further that the validity of Bank Guarantee Bond shall be extended from time to time, depending upon extension of contract granted in terms of Clause 17 of Part-II of the Standard General Conditions of Contract. GCC April-2022.
	3	Further, in case Security Deposit has been submitted as Term Deposit Receipt/Bank Guarantee Bond in full amount, the Earnest Money deposited by the Contractor with his tender will be returned by the Railways.

		Note: After the work is physically completed as certified by competent authority, Security Deposit recovered from the running bills of a Contractor can be returned to him, if he so desires, in lieu of Term Deposit Receipt/irrevocable Bank Guarantee for equivalent amount from Scheduled Bank, to be submitted by him.
	B	(i) Refund of Security Deposit: Security Deposit mentioned in sub clause A (1) above shall be returned to the Contractor after the following: (a) Final Payment of the Contract as per clause 51. (1) of GCC and (b) Execution of Final Supplementary Agreement or Certification by Engineer that Railway has No Claim on Contractor and (c) Maintenance Certificate issued, on expiry of the maintenance period as per clause 50. (1), in case applicable. (ii) Forfeiture of Security Deposit: Whenever the contract is rescinded as a whole under clause 62 (1) of GCC, the Security Deposit already with railways under the contract shall be forfeited. However, in case the contract is rescinded in part or parts under clause 62 (1) of GCC, the Security Deposit shall not be forfeited.
	C	No interest shall be payable upon the Earnest Money and Security Deposit or amounts payable to the Contractor under the Contract, but Government Securities deposited in terms of Sub-Clause 16.(4)(b) of Part-II of GCC will be payable with interest accrued thereon.
2.3		<u>Performance Guarantee:</u>
	A	The successful bidder shall have to submit a Performance Guarantee (PG) within 21 (Twenty-one) days from the date of issue of Letter of Acceptance (LOA) . Extension of time for submission of PG beyond 21 (Twenty one) days and up to 60 days from the date of issue of LOA may be given by the Authority who is competent to sign the contract agreement. However, a penal interest of 12% per annum shall be charged for the delay beyond 21 (Twenty one) days, i.e. from 22 nd day after the date of issue of LOA. Further, if the 60 th day happens to be a declared holiday in the concerned office of the Railway, submission of PG can be accepted on the next working day. In all other cases, if the Contractor fails to submit the requisite PG even after 60 days from the date of issue of LOA, the contract is liable to be terminated. In case contract is terminated railway shall be entitled to forfeit Earnest Money Deposit and other dues payable against that contract. In case a tenderer has not submitted Earnest Money Deposit on the strength of their registration as a Startup recognized by Department of Industrial Policy and Promotion (DIPP) under Ministry of Commerce and Industry, DIPP shall be informed to this effect. The failed Contractor shall be debarred from participating in re-tender for that work.
	B	The successful bidder shall submit the Performance Guarantee (PG) in any of the following forms, amounting to 5% (Five Percent) of the contract value in favour of Sr. DFM, Central Railway, Nagpur only: i) A deposit in cash; ii) Irrevocable Bank Guarantee; iii) Government Securities including State Loan Bonds at 5% below the market value; iv) Deposit Receipts, Pay Orders, Demand Drafts and Guarantee Bonds (Performa enclosed as Annexure). These forms of Performance Guarantee could be either of State Bank of India or of any of the Nationalized Banks; v) Guarantee Bonds executed or Deposit Receipts tendered by all scheduled banks; vi) A Deposit in Post Office Saving Bank; vii) A Deposit in the National Saving Certificates; viii) Twelve years National Defence Certificates;

		ix) Ten years Defence Deposits; x) National Defence Bonds and xi) Unit Trust Certificate at 5% below market value or at face value whichever is less. Also, FDR of nationalised banks only in favour of Sr. DFM, Central Railway, Nagpur (free from any encumbrance) may be accepted.
	C	The Performance Guarantee shall be submitted by the successful bidder after the Letter of Acceptance (LOA) has been issued, but before signing of the contract agreement. This P.G. shall be initially valid up to the stipulated date of completion plus 60 days beyond that. In case, the time for completion of work gets extended, the Contractor shall get the validity of P.G. extended to cover such extended time for completion of work plus 60 days.
	D	The value of PG to be submitted by the Contractor will not change for variation up to 25% (either increase or decrease). In case during the course of execution, value of the contract increases by more than 25% of the original contract value, an additional Performance Guarantee amounting to 5% (five percent) for the excess value over the original contract value shall be deposited by the Contractor. On the other hand, if the value of contract decreases by more than 25% of the original contract value, Performance Guarantee amounting to 5% (five percent) of the decrease in the contract value shall be returned to the Contractor. The PG amount in excess of required PG for decreased contract value, available with Railways, shall be returned to Contractor as per his request duly safeguarding the interest of Railways.
	E	The Performance Guarantee (PG) shall be released after physical completion of the work based on 'Completion Certificate' issued by the Competent Authority stating that the Contractor has completed the work in all respects satisfactorily.
	F	Whenever the contract is rescinded, the Performance Guarantee already submitted for the contract shall be encashed in addition to forfeiture of Security Deposit available with Railway.
	G	The Engineer shall not make a claim under the Performance Guarantee except for amounts to which the President of India is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of: (i) Failure by the Contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer may claim the full amount of the Performance Guarantee. (ii) Failure by the Contractor to pay President of India any amount due, either as agreed by the Contractor or determined under any of the Clauses/Conditions of the Agreement, within 30 days of the service of notice to this effect by Engineer. (iii) The Contract being determined or rescinded under clause 62 of the GCC.
2.4		Location of the Site: Work is to be executed at various railway stations and any establishments governed by railways over Nagpur Division on Central Railway.
		ANY ADDITIONAL INFORMATION ABOUT THE LOCATION OF THE SITE CAN BE KNOWN FROM RAILWAY TIME TABLE OR RAILWAY MAP.
2.5		Technical Specifications (* Wherever Applicable):
	A	The Stations/LC Gates/Site locations covered by this tender are located in both 25 KV AC Electrified Section & Non Electrified section. The equipments and installation practices of telecommunication system will have to be in line with the

		requirement of AC Electrified section as specified in manual of instructions of installation and commissioning of S&T equipments in 25 KV AC Electrified section.*
	B	The work to be carried out in accordance with telecommunication Plans for the stations/level crossing gate, issued by the Railways. These are tentative and minor variation/alteration may take place. The Tenderer should be ready to carry out corrections / alterations / additions in design of circuits and other works arising out of these changes without any additional cost. The railway's decision in this regard will be final and binding.* - The work is to be carried out in accordance with latest FTTH technology for Implementation of Railnet / IP based Voice Telephony for Unified Communication Backbone on Indian Railway. * - Circuit designed by the Tenderer will have to be altered or modified as suggested by Sr. Divisional Signal and Telecom Engineer, Central Railway, Nagpur or his authorized representative to meet the safety requirements / specifications and Central Railway practices in vogue. Such alteration, modifications etc. will have to be carried out by the Tenderer, free of cost. * - All the drawing shall be drawn on AutoCAD and the Tenderer should submit the original CD for all the drawings along with tracings, prints and plastic folders. * - All the tracings shall be drawn on good quality "Gateway" brand 95 GSM tracing paper. No change shall be made in any of the approved drawings without permission of Chief Signal & Telecom Engineer or his Authorized representative. * - All the drawing shall include the name of the work, as given by the Railways blocks, for signature of Railways officials and contractor. * - The entire drawings hall is signed by the contractor or his authorized Representative. * - All the drawing should be drawn as per the standard practice of Central Railway. * *Note: For circuit design, contractor will be required to authorize a person for designing the circuits. The name of such person should appear on all sheets with signature. The mistakes in circuit design will attract a token penalty over and above the penalty/L.D. as provided in GCC. The penalty shall be recovered at the rate of Rs.200/- per sheet, if the number of mistakes is above 2%. Decision of Railway about mistakes shall be final.
	C	It should be specifically noted that some of the detailed drawing may not have finalized by the Railway & will therefore be supplied to the contractor as & when they are finalized on demand. No compensation whatsoever on this account shall be payable by the Railway Administration.
		No claim whatsoever will be entertained by the Railway on account of any delay or hold up of the work(s) arising out of delay in approval of drawings, changes, modifications, additions, omission & site lay out plan or detailed drawings & design & or late supply of such materials as are required to be arranged by the Railway or due to any other factor on Railway account.
	D	As per Railway Board Amendment No.94/CE.I/CT/53 dated 18.05.2007, If any plan / drawing is attached with the Tender Form, Rs.200/- per plan / drawing will be levied extra.
	E	As per CSTE CSTM's letter no. N/659/WM/CC/Tender Policy/Pt.I dated 07.05.2007, no claim for idle labour &/or idle machinery etc. on any account will be entertained; similarly, no claims shall be entertained for business loss or any such loss.

	F	The installation practices of all Telecommunications gears should be as per the Telecommunication Manual issued in 2022 and to suit latest relevant correction slips and Central Railway practice.
	G	Tenderers are advised to inspect the site and assess the actual requirement before quoting for the work.
2.6		<u>Contractor's scope of work:</u>
		All the works shall be executed confirming to the specifications and drawings mentioned in Tender Schedule of work and as per Technical Specifications mentioned in Chapter-III & Chapter-IV. All the relevant clauses which are applicable to the items of schedule of material and works shall be adhered to.
2.7		<u>Railway's scope of work:</u>
	A	Provision of site for temporary accommodation for keeping contractor's men and material, subject to availability of site within Rly. Premises and construction for making temporary accommodation will have to be done by the tenderer at his own cost.
	B	Supervision of each and every activity.
	C	Supervision, during fault localization, joint testing and rectification.
	D	Co-ordination with other departments of Rlys. and arranging approval for track crossing, road crossing, cable across bridges, culverts etc.
	E	Accommodation for imparting training to Railway officials / supervisors.
2.8		<u>Records & Registers:</u>
	A	The Contractor/s shall maintain accurate records, plans and charts showing the dates and progress of all main operations and the Engineer shall have access to this information at all reasonable times. Records of tests made shall be handed over to the engineer's Representative after carrying out the tests. The following registers will be maintained at site by the Contractor/s, which should be seen and signed by the Contractor or his authorized representative on daily basis for compliance of instructions recorded therein for satisfactory completion of work.
	B	<u>Site order Register:</u> The Contractor/s shall properly sign in site order register, orders given by the Engineer or his representative or his superior officers and comply with them. The Contractor/s shall report the compliance to the Engineer in good time so that it can be checked.
	C	<u>Labour Register:</u> This register will be maintained to show daily strength of labour in different categories by the contractor/s.
	D	<u>Daily progress register:</u> It shall indicate daily progress of work done by the contractor shall be got signed at least once in three days from Engineer in token of acceptance. The format of the Register will be advised by the Engineer.
	E	Any other register considered necessary by the Engineer shall be maintained at site in which the representative to the Engineer and the Contractor/s or his/their authorized representative will have to sign. The registers, programs, charts etc. will be the property of the Railway.
2.9		<u>Materials & Workmanship:</u>

	A	All the materials and workmanship used in this work shall be of extremely good quality and high class in every respect and is expected to give trouble free service.
	B	The equipments/materials as per RDSO specifications are to be procured from the RDSO approved sources only. The guidelines stipulated for stores' procurement will hold good for procuring these items from RDSO approved sources.
	C	Equipment/material in the schedule as per IS specification shall be procured from BIS licensed firms only. In case there are no BIS licensed firms for the scheduled item, the equipment/material are to be procured from manufacturers of repute/their authorized dealers after approval of Engineer-in-charge before supply.
	D	Equipment/material in the schedule where RDSO/IS specification has not been stipulated, shall be procured from manufacturers of repute/their authorized dealers approved by the Engineer-in-charge before supply.
	E	All the materials should be strictly as per the Specifications indicated. All the materials to be supplied by the Tenderer are to be supplied at the nominated Consignee depot. The loading, unloading and transportation of these materials from the Depot to the site of work at a later stage will have to be done by the Tenderer at his own cost. Alternatively, if the site of work is ready and work is in progress, physically, the materials can be brought to the site directly. The security of the material brought to the site of work will remain with the Tenderer till the material taken over are duly erected and accepted by the Railway.
	F	Materials required to carry out this work if supplied by the Railways, will be issued at the nominated Consignee depot on specific requisitions by the Contractor and as per requirement consistent with the progress of works and/or progress of supply of fabricated materials to the Railway. The contractor will have to load, transport these materials to the site of work and unload at his own cost. Empty cable drums and balance materials after completion of work, if any should be returned back at the nominated Consignee depot.
	G	The cost of transit insurance required as per rules will be borne by the Tenderer.
	H	Cable laying work will be generally done according to the details of Cable Plan and instructions issued by Sr. Divisional / Division Signal & Telecommunication Engineer / Engineer in-charge of the work. Whenever the dimensions of cable Trenches as mentioned in the Tender Schedule are not easily achievable due to terrain conditions, then payments will be made on a pro-rata basis, for the dimensions achieved.
2.10		<u>INSURANCE OF MATERIALS AND INSTALLATIONS:</u>
	A	The Contractor shall take out and keep in force a Policy or policies of Insurance for all materials including railways supply materials/equipment irrespective of whether used up in the portion of work already done or kept for the use in the balance portion of the work until such works are provisionally handed over to the Railways. For this purpose the works are deemed to have been provisionally handed over when completion certificate is issued.
	B	The contractor shall not be liable for losses/damages to the materials either used up in the portion of work done or his material kept for use at site, in consequence of mutiny, or other similar causes over which the Contractor has no control and which cannot be insured. Such losses or damages shall be the liability of the Railway and if required by the Railway, be made good by the contractor, at the cost of the Railway i.e. contractor shall not be liable for any damage to any part of the system during the complete period including AMC period, if the damage is due to mob,

		public agitation or any uncontrolled activity including natural calamities. But contractor shall safeguard all the materials/components from bad weather conditions.
	C	The contractor should, however insure the stores brought to site against risks in consequence of war and invasion as required under the Emergency Risk (Goods Insurance) Act in force from time to time.
2.11		<u>INDEMNITY BOND / BANK GUARANTEE against security of Railway Material:</u>
	A	The Tenderer will have to furnish a Bank Guarantee issued from SBI or any Nationalized / Scheduled Bank for the Security of the Railway material issued to him, in favour of Senior Divisional Finance Manager, Central Railway, Nagpur. The value of such B.G. Bond will be minimum of Rs.1,00,000/-, which will be increased at the direction of Engineer in-charge of the work depending upon the quantity of material issued at a time. However, at any stage the value of the material issued to the Tenderer and not utilized / installed / fixed should not exceed the value of the Bank guarantee. The value of such B.G. bond will be increased at the direction of Engineer in-charge of work depending upon the quantity of materials issued at a time. However, at no stage the value of materials issued to the Tenderer for execution of the work will be more than the value of the Bank Guarantee. OR The Contractor will have to furnish an Indemnity Bond for all the value of materials (Format for Indemnity Bond is enclosed as Annexure-J in Chapter-V) for the Security of the Railway material issued to him.
	B	Indemnity Bond / Bank guarantee, if any, submitted by the Tenderer against the security of the material issued to him for execution of work will be released after commissioning of work and when all balance material is returned by contractor; i.e. after signing the final material statement for closing the contract. The security of the material brought to the site of work will remain with the Contractor, till commissioning of the complete structure and same is handed over to Railway's nominated representative of Engineer-in-charge.
2.12		<u>Inspection:</u>
	A	The Electrical Telecom materials, to be supplied by the Tenderer and as per RDSO's Specification/Drawing appearing in the critical list contained in Railway Board's letter No.74/RS(G)/379/2Pt. dated 04.03.1991 & 18.06.1991 will have to be procured from RDSO approved firms only and will be supplied duly inspected by RDSO irrespective of value. The list of critical Telecom / Signalling items is given below: (i) Voltage stabilizers, Chargers and other power supply equipment (ii) Gate Telephones (iii) U/G Joints Kit
	B	The Electrical Telecom materials, other than those included in the critical list of items mentioned above, to be supplied by tenderer and are as per RDSO's specifications/drawings will have to be procured from RDSO approved firms only and will be supplied duly inspected by RDSO/RITES if the total value of the item is more than `5.00 Lakh as per Railway Board's letter No.2000/RS(G)/379/2 dated 06.09.2017.
	C	Inspecting agency of RDSO / RITES / CONSIGNEE for items to be supplied is given in schedule against each item.

	D	Telecom/Signalling items not inspected by RDSO/RITES for any reason will be inspected by the Consignee / Authorized Representatives of Railways.
	E	Whenever equipment/material as per IS specification in schedule are inspected by Authorized Representatives of the Railways/Consignee, the Tenderer will be required to furnish manufacturer's Guarantee Certificate along with test certificates in addition to his own warranty certificate.
	F	For equipment/material as per IS specification, if the consignee, after verifying all the documentary evidence, visual inspection, measurement of dimensions/key electrical parameters as applicable and any other checks as per facility available with him, is not fully satisfied and if he considers necessary, he can direct the samples to be tested with approval of Engineer-in-charge, as per the specifications given in the schedule in a laboratory. The laboratory will be approved by Engineer-in-charge and shall be a BIS approved laboratory.
	G	All expenses towards test charges shall normally be borne by Railways. However if the samples are found inferior when compared to stipulated specification/drawing, the test charges shall be borne by the contractor.
	H	All other equipment/material, where neither RDSO/IS specifications are stipulated, and which are to be supplied with consignee inspection shall be procured from manufacturers of repute/their authorized dealers approved by the Engineer-in-charge before supply. In such cases, if the tenderer is not able to furnish manufacturer guarantee certificate and test certificate for e.g. for items being procured through open market, the tenderer shall furnish his guarantee & warranty for these items.
	I	The Railway shall have full power to reject any material that it may consider to be defective or inferior in quality, workmanship or otherwise not in accordance with the Specification and the Railway's decision shall be final, even though they might have been inspected by RDSO/RITES. The Tenderer shall remove forthwith any such material rejected and replace them promptly at his own cost.
	J	Inspection Charges of RDSO and RITES will be borne by the Railways.
	K	The Tenderer shall furnish guarantee of materials/equipments supplied by him for a period of one year after commissioning for trouble-free performance. Any defects noted during this period will have to be rectified by him promptly at his own cost.
	L	On specific circumstances if due to delay in inspection by RITES/RDSO or any other unforeseen reason like transporters strike, strike in manufacturer's factory etc., the material to be supplied by the contractor is delayed; such material can be issued to the contractor on purely loan basis if available in the concerned depot. However, this will not be contractor's right to get material on loan. Railway reserves the right to refuse to give the material on loan. Any delay in giving material on loan by the railway or refusal should not cause any delay in progress of work and the contractor cannot escape from his responsibilities in such case. Material on loan should be given only in exceptional cases, if decided by site engineer. If the contractor fails to return such material, the cost of such material will be recovered from the contractor as per railway rules.
2.13		<u>Completion Period:</u>
	A	Time is the essence of this contract and time schedule shall be strictly adhered to. The entire work as per the Contract will have to be completed within 09 (Nine) months from date of issue of (LOA) on a progressive basis . The Tenderer will be responsible for progress of work on progressive basis from the date of issue of acceptance letter. Since the progress of the work is critically related to the supply of material by the contractor, he will have to supply materials on a progressive basis, so that the work can be completed within stipulated time period.

	B	It should be clearly borne in mind that the works which are not dependent upon the receipt of material duly inspected by RDSO/RITES or on Railway's own share of works, are to be progressed and completed by the contractor well before the final date of completion to avoid accumulation of works towards the fag end. If for any unforeseen reason, the work is delayed on railway's account, and then suitable extension to the completion period shall be granted without liquidated damages.
	C	The Tenderer shall make his own arrangements at his own cost for all plant and machinery, equipment's, tools, fuel & consumable stores and other facilities including spare parts required to ensure efficient methodical execution of the work and shall deploy sufficient technical, non-technical manpower and labour to complete the work within specified time to the entire satisfaction of Engineer in-charge. The rates quoted and accepted shall be deemed to be inclusive of all charges of such items. If, however, the plant and machinery/other facilities, equipments, and tools requisitioned by the contractor are not available in Railway's stock or the Railway decides not to supply the same for reasons whatsoever, neither the Railway shall be bound to arrange for the supply thereof nor will the Railway's inability to supply them be accepted as an excuse for delay in the completion of the works/or for any claims thereof.
2.14		<u>Warranty Period Maintenance Period & AMC Period :</u>
		Warranty Period: 01 (One) Year from date of actual commissioning of system. Maintenance Period: 01 (One) Year from the date of end of the Warranty Period Above system. AMC: Nil.
2.15		<u>Warranty:</u>
	A	The contractor shall warrant that everything to be furnished here under shall be free from all defects and faults in material, workmanship and manufacture and shall be the highest grade and consistent with the established and generally accepted standards for materials of the type ordered in full conformity with the contract specifications, drawings, or samples, if any and shall if operable, operate properly.
	B	The Contractor shall, if required, replace or repair the goods or such portion thereof as is rejected by the Railway free of cost at the ultimate destination or at the option of the Railway and contractor shall pay to the Railway value thereof at the contract price and such other expenditure and damages as may arise by reasons of the breach of the condition herein, specified.
	C	All replacement and repairs that Railway shall call upon the contractor to deliver or perform under this warranty shall be delivered and performed by the contractor promptly and satisfactorily, if the contractor so desires the replaced parts can be taken over by him, or his representative in India for disposal as he deems fit within a period of three months from the date of replacement of goods / parts. At the expiry of this period, no claim whatsoever shall lie on the Railway.
	D	If the replacement or renewals are of such a character as may affect the efficiency of the system, the purchaser shall have the right to give the contractor within one month from such replacement or renewal notice in writing that test on completion will be carried out at his cost. Should such tests show that the plant sustains the guarantee in the contract; the cost of the tests shall be borne by the purchaser. Should the guarantees not be sustained, the cost of the tests shall be borne by the contractor.

	E	Until the final certificate shall have been issued, the contractor shall have the right to entry with permission of Railways, at his own risk and representatives, whose names shall have previously been communicated, in writing, to the purchaser at all reasonable working hours upon all necessary parts of the works for the purpose of inspecting the working and the records of the plant and taking notes there from and if he desires at his own risk and expense, making any tests, subject to the approval of the purchaser which shall not be unreasonably withheld.
	F	The warranty of the system/item shall start from the date of commissioning of that particular system/item.
2.16		<u>Progress Reporting:</u>
		The Contractor shall submit the periodic progress reports at regular intervals regarding the status and progress of work to the Railways. The details and Performance of the report will mutually be agreed after award of the contract. Such reports shall be for daily manpower, equipment and plant development, weekly work progress and monthly progress review reports. All actions as directed by Railways, pursuant to such reports shall be promptly attended to by Contractor.
2.17		<u>Measurement Of Works:</u>
	A	Payments for the works shall be made in accordance with approved designs and drawings and measured in relevant units. The measurements will be made generally in accordance with standard engineering practice and in conformity with the General Condition of Contract. All the measurements taken shall be jointly recorded and signed by the contractor's and Railway's representatives in the measurement books. Bills shall be prepared on the basis of these measurement books.
	B	The contractor will obtain written approval of the supervision after completion of the various sub-items of each work mentioned in the Schedule wherever applicable).
	C	The contractor shall sign the measurement as a token of acceptance of the measurement entered by the supervisor in-charge of the work (wherever applicable).
	D	The contractor should ensure that measurement has been recorded for such work, which is not possible to measure subsequently after completion of the activity and shall remain hidden. For example:
	I	After trenching is done
	II	After RCC trunking is placed in trench and properly aligned.
	III	After the above is laid properly
	IV	After the earth is filled
	V	After brick/slab/capping is laid
2.18		<u>Terms of Payment:</u>
	A	Payment of on account bill for the Tendered work will be arranged by the Sr. Divisional Signal & Telecom Engineer, Engineer in-charge of the work through the associate Accounts Officer.

B	For Supply items – (i) 80% (Eighty percent) Payment shall be made on receipt of materials at specified stores depots and on submission of the following documents. - Original Inspection certificate issued by concerned Inspecting Officer. - Challan /Invoice in duplicate. - A certificate by the contractor that the materials supplied are as per the contract and the amount claimed in the invoice is correct as per terms of the contract. (ii) Balance 20% (Twenty percent) of the payment shall be made after the satisfactory installation and commissioning of the system/sub-system (including all wiring, fixing etc.) (iii) 100% will be paid for spares and for items, which are not required to be erected by the contractor, on receipt of the equipment and no loss certificate by the Consignee.
C	<u>PAYMENT AGAINST SUPPLY & EXECUTION ITEMS (MIXED ITEMS):</u> a) 80% (Eighty percent) payment will be made upon supply component of the item upon delivery to the nominated stores depot of the Engineer-in-charge and on submission of the following documents: - - Original Inspection certificate issued by concerned Inspecting Officer. - Challan/Invoice in duplicate. - A certificate by the contractor that the materials supplied are as per the contract and the amount claimed in the invoice is correct as per terms of the contract. b) Balance 20% (Twenty percent) of the payment shall be made after the satisfactory installation and commissioning of the system/sub-system (including all wiring, fixing etc.) Against such mixed items, excess quantity of material after completion of execution, if any, may be retained by the Railways at the discretion of Engineer-in-charge and in that case no payment beyond 80% (Eighty percent) shall be made to the contractor. The material and its quantity shall be treated as regular Railway material and shall be taken into store ledger of the concerned stores depot to be used for any purposes whatsoever. If the Engineer-in-charge does not want or contractor does not agree for this condition then the excess quantities will be returned to the contractor and Railway will recover payments made to him for the returned quantity.
D	<u>PAYMENT AGAINST PURE EXECUTION ITEMS:</u> 100% (Hundred percent) payment will be made upon execution of the item on the basis of the certified measurement of work jointly recorded in the MEASUREMENT book by the representative of Engineer-in-charge (consignee) and contractors' representative
E	On account / final payments as per above mentioned conditions will be made on the basis of measurements recorded in Measurement Book (MB) by the Consignee.
F	Wherever the Central/State makes it obligatory for the Railway to deduct any amount towards sales tax, works contract tax or any Tax (after roll out of GST as per provisions made) same will be deducted in addition to the income tax remitted to concerned authority.

	G	Income tax as applicable on date or levied subsequently by the Government during the currency of the contract on the gross amount payable to the contractor will be recovered from all bills in terms of section 194(c) of the Income Tax Act, 1961 as introduced with Finance Act, 1972 unless the exemption certificate issued by the Income Tax Department is produced during the currency of the contract. Deduction of Income Tax from each contract bill will be made – @ 2% for Company / Partnership Firms and @ 1% for Non-Company (Individual).
	H	The Railways reserve the right to vary, if required, the quantity of each item of work / supply up to 25% at the same rate and on the same terms and conditions.
	I	The Railway reserves the right to split / delete certain items of the tender without assigning any reason.
2.19		<u>MODE OF PAYMENT:</u>
	A	<u>Payment through RTGS/NEFT:</u>
		Payment will be made through Electronic Fund Transfer system (RTGS/NEFT). Tenderer is requested to give their Bank Details in the enclosed PERFORMA as Annexure for making payment through RTGS/NEFT. Tenderer should upload/attach the scan copy of this PERFORMA, duly filled, signed and stamped at the time of submission of online tender (E-tender).
	B	<u>Letter of Credit (LC):</u>
	i	For all the tenders having advertised cost of Rs.10 lakh or above, the contractor shall have the option to take payment from Railways through a letter of credit (LC) arrangement.
	ii	This option of taking payment through Le arrangement has to be exercised in IREPS (Indian Railway Electronic Procurement System - the e-application on which tenders are called by Railways) by the tenderer at the time of bidding itself, and the tenderer shall affirm having read over and agreed to the terms and conditions of the LC option.
	iii	The option so exercised, shall be an integral part of the bidder's offer.
	iv	The above option of taking payment through LC arrangement, once exercised by tenderer at the time of bidding, shall be final and no change shall be permitted, thereafter, during execution of contract.
	v	In case tenderer opts for payment through LC, following shall be the procedure to deal release of payment through LC:
	(a)	The Le shall be a sight LC
	(b)	The contractor shall select his Advising/Negotiating bank for LC The incidental cost towards issue of Le and its operation thereof shall be borne by the contractor.
	(c)	SBI, New Delhi, Main Branch will be the nodal branch for issue of LCs based on online requests received from Railway Accounts Units for tenders opened in financial year 2018-19. SBI branches where the respective Railway Accounts Office has its Account (local SB1 branch) will be the issuance/reimbursing branch for LC issued under this arrangement. The Bank shall remain same for this tender till completion of contract. The incidental cost @0.15% per annum of LC value, towards issue of LC and operation thereof shall be borne by the contractor and shall be recovered from his bills.

	(d)	The LC shall be opened initially for duration of 180 to 365 days in consultation with contractor. The LC shall be extended time to time as per the progress of the contract, on the request of the contractor. The value of LC to be opened initially as well as extended thereafter shall be finalised by the engineer in consultation with the contractor on the basis of expected progress of work.
	(e)	The LC terms and conditions shall inter-alia indemnify and save harmless the Railway from and against all losses, claims and demands of every nature and description brought or recovered against the Railways by reason of any act or omission of the contractor, his, agents or employees, in relation to the Letter of Credit (LC). All sums payable/borne by Railways on this account shall be considered as reasonable compensation and paid by contractor.
	(f)	The LC terms and conditions shall inter-alia provide that Railways will issue a Document of Authorisation after passing the bill for completed work, to enable contractor to claim the authorized amount from their bank.
	(g)	The acceptable, agreed upon document for payments to be released under the LC shall be the Document of Authorisation.
	(h)	The Document of Authorization shall be issued by Railway Accounts Office against each bill passed by Railways.
	(i)	On issuance of Document of Authorisation, a copy of Document of Authorisation shall be posted on IREPS for download by the contractor. A digitally signed copy of Document of Authorisation shall also be sent by Railway Accounts Office to Railway's bank (Local SBI Branch).
	(j)	The contractor shall take print out of the Document of Authorization available on IREPS and present his claim to his bank (advising Bank) for necessary payments as per LC terms and conditions. The claim shall comprise of copy of Document of Authorization, Bill of Exchange and Bill.
	(k)	The payment against LC shall be subject to verification from Railway's Bank (Local SBI Branch).
	(l)	The contractor's bank (advising bank) shall submit the documents to the Railway's Bank (Local SBI Branch).
	(m)	The railway's bank (issuing bank) shall, after verifying the claim so received w.r.t. the digitally signed Document of Authorization received from Railway Accounts Office, release the payment to contractor's bank (advising bank) for crediting the same to contractor's account.
	(n)	Any number of bills can be dealt within one I.C, provided the sum total of payments to contractor is within the amount for which LC has been opened.
	(o)	The LC shall be closed after the release of final payment including P VC amount, if any, to the contractor.
	(p)	The release of performance guarantee or security deposit shall be dealt directly by railway with the contractor i.e., not through LC.
2.20		<u>Conservancy Cess Charges:</u>
		In terms of Railway Board's letter no.F(x)I/95/1/1 dated 16.07.2012, Tenderer should note that the revised Conservancy Cess charges will be recovered from contractual bills as applicable depending upon the number of labour appointed by the contractor for completion of work. The number of labour appointed for such particular work will be certified by the Consignee / Concerned Supervisor and is to

		be sent along with Measurement Book (MB) for further processing. Conservancy cess charges as per following table will be deducted from the Contractor's running bills:												
		<table> <tr> <th>SN</th><th>Average number of labours or workman employed per day</th><th>Conservancy Cess charges to be recovered PER MONTH</th></tr> <tr> <td>1</td><td>1 to 5</td><td>` 106/-</td></tr> <tr> <td>2</td><td>6 to 10</td><td>` 208/-</td></tr> <tr> <td>3</td><td>11 to 25</td><td>` 523/-</td></tr> </table>	SN	Average number of labours or workman employed per day	Conservancy Cess charges to be recovered PER MONTH	1	1 to 5	` 106/-	2	6 to 10	` 208/-	3	11 to 25	` 523/-
SN	Average number of labours or workman employed per day	Conservancy Cess charges to be recovered PER MONTH												
1	1 to 5	` 106/-												
2	6 to 10	` 208/-												
3	11 to 25	` 523/-												
2.21		General:												
	A	Price Variation Clause (PVC) shall NOT BE APPLICABLE to this tender.												
	B	All the consumables and sundry installation materials required for execution of this work like Nut and Bolts, Welding Rods, Sleeves, Lugs etc., and not listed as per the detailed schedule will have to be brought by the Tenderer at his own cost.												
	C	Cement & Steel for use in the works should be procured by the Tenderer at their own cost from the main producers /their authorized dealers /authorized stock-yards which should confirm to IS specification. Individual rates quoted by the Tenderer should be inclusive of cost of Cement / Steel wherever applicable.												
	D	Cement shall of 43 grade Portland conforming to IS Specn. 8112 (latest) of L&T/ Birla/ ACC/ Raymond/ Jaypee/ Grasim/ Ambuja/ Lafarge/ Century make. The cement will be in bags and bear the following information in legible markings: (i) Manufacturers name, (ii) Regd. trade mark of manufacturer, if any, (iii) Type of cement, weight of each bag in Kgs. or nos. of bags / ton, (iv) Date of manufacture generally marked as week of the year/year of manufacture												
	E	The Tenderer shall make his own arrangement for accommodation, for his staff during testing and commissioning period. Water for drinking purpose if available at the station will be given. However, Railways take no guarantee for this facility. Free power will be given for installation work including battery charging, wherever available. Non-availability of Power will not be a reason for the slow progress of work. If power is not available, the contractor shall make his own arrangement for portable Genset / electrical power.												
	F	The Tenderer shall do no work that may interfere with train traffic until adequate protection has been arranged as per the instruction of the Site in charge.												
	G	All the tools & Measuring Instruments, required for installation & Testing will have to be brought by the Tenderer at his own cost.												
	H	The Railway Officers / staff will be associated with the Testing & commissioning of the work.												
	I	Installation practices of all telecom/Signal gears should be as per the Telecom / Signal Engineering Manual (New) and to suit the latest correction slips and C. Rly practices in vogue.												
	J	The Tenderer having more than 20 labour, is required to obtain the labour license from the licensing Officer under Provision of Contract Labour (Regulation and abolition) Act 1970 read with Contract Labour (Regulation and abolition) Central Rules 1970. They should obtain a proper and valid labour license for the concerned												

		<u>work from the concerned Asst. Labour Commissioner or licensing officer of the area and the photo copy of the labour license must be submitted to Railway for records. Failure to do so, will attract legal action against the Tenderer.</u>
	K	Tenderer should strictly follow the provisions of Employees Provident Fund (EPF) & Miscellaneous Provisions (MP) Act, 1952. In this connection, Tenderer is requested to obtain PF Code number and submit the details of the same to this office. Tenderer is also requested to submit the declaration to this office before passing of every bill that 'PF deductions, wherever applicable, have been made and deposited with the EPFO along with prescribed contribution'.
	L	The Tenderer has to issue identity card to each and every person employed by him and deployed for execution of the contract work at his own cost (Proforma enclosed as Annexure).
	M	<u>EMPLOYMENT OF TECHNICAL STAFF:</u> Tenderer shall employ following Qualified Engineers during execution of the allotted work: i. One Qualified Graduate Engineer when cost of work to be executed is Rs.200 lakhs and above , and ii. One Qualified Diploma Holder Engineer when cost of work to be executed is more than Rs.25 lakhs, but less than Rs.200 lakhs. Further, in case the contractor fails to employ the Qualified Engineer, as aforesaid in Para above, he, in terms of provisions of Clause 26A.2 to the General Conditions of Contract, shall be liable to pay an amount of Rs.40,000/-and Rs.25,000/- for each month or part thereof for the default period for the provisions, as contained in Para (i) and (ii) above respectively.
2.22	A	Contractor is to abide by the provisions of payment of Wages act & Minimum Wages act in terms of clause 54 and 55 of Indian Railways General Condition of Contract. In order to ensure the same, an application has been developed and hosted on website www.shramikkalyan.indianrailways.gov.in . Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The registration/updating of portal shall be done as under: (a) Contractor shall apply for onetime registration of his company/firm etc. in the Shramik Kalyan Portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration on the portal within 7 days of receipt of such request. (b) Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LOAs issued in his favour. (c) The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LOA) / Contract Agreements on Shramik Kalyan portal within portal within 15 days of issue of any LOA for approval of concerned Engineer. Engineer shall update (if required) and approve the details of LOA filled by contractor within 7 days of receipt of such request. (d) After approval of LOA by engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on Shramik Kalyan Portal on monthly basis. (e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.

	B	While processing payment of any 'On Account bill' or 'Final bill' or release of 'Advances' or 'Performance Guarantee / Security deposit', contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan Portal at www.shramikkalyan.indianrailways.gov.in till _____ Month _____ Year".
2.23		<u>Appendix To Special Conditions Of Contract:</u>
	A	Sr. Divisional Signal & Telecom Engineer/Nagpur and Divisional Signal & Telecom Engineer/ Nagpur will be the Engineer in-charge of the work.
	B	Senior Divisional Finance Manager / Nagpur will be the Associate Finance Officer.
	C	Senior Section Engineer (Tele) Ajni will be the nominated depot and Consignee for the material.
	D	Senior Section Engineer (Tele) Nagpur/AJNI/WARDHA/WARORA/AMLA Depot will be the Field Supervisor for the work.

End Of Chapter-II

CHAPTER – III

TECHNICAL SPECIFICATIONS AND REQUIREMENTS FOR SUPPLY OF MATERIAL

1. Schedule A3 Item No. 1

Mbps Router: Specification Of Router:

Conforming to the specifications of RDSO/SPN/TC/84/2008 Rev.0. or later. Intended Use: For Railway UTS/PRS and FOIS Locations.

2 Schedule A3 Item No. 2

24 Port L2 POE Managed Switch

Conforming to the specifications of RDSO/SPN/TC/83/2020 Rev.2.1 or later.
Intended Use: For Railway UTS/PRS and FOIS Locations and IT Networking

3 Schedule A3 Item No. 3

8 Port L2 Non POE Managed Switch

Conforming to the specifications of RDSO/SPN/TC/83/2020 Rev.2.1 or later.
Intended Use: For Railway UTS/PRS and FOIS Locations

4 Schedule A3 Item No. 4

2 Mbps G-703/V-35 MODEM Pair.

5 Schedule A3 Item No. 5

30 Mbps 2W/4W LAN Extender

Conforming to the specifications of RDSO/SPN/TC/82/2020 Rev.2.0 or later.
Intended Use: For Railway IT Networking and FOIS Locations

6 Schedule A3 Item No. 7

6 Core Armoured OFC Fiber Cable

Description: Central Loose Tube with jelly compound to prevent water ingress. Armour with high quality electro chromium corrugated steel tape.

Operating Temperature: -20 Deg. C to +60 Deg. C

Jacket material: UV stabilized HDPE Sheath.

Optical Fiber Specification: Fiber Type: 9/125 SM 1.4674/1.469, Mode Field / Cladding Diameter (um): 9.3 +/- 0.5 ; 125 +/- 1.0. Wavelength (nm) / attenuation Max in dB/Km: 1310/0.38, 1550/0.25. Dispersion Less than equal 3.5 / 18 PMD (ps/km) Less than equal 0.2. Cable Cut Off Wavelength (nm) Less than equal 1260. Additional Information: Test Report (Attenuation) to be supplied with each cable Drum.

7 Schedule A3 Item No. 11

Optical Fiber Power Meter

Certification and Standard: Conformity to ISO 9001: Yes. CE certified: No.

General Specification: PON Technology Supported: EPON, GPON. Detector Type: InGaAs.

Display Type: LCD.

Optical Parameter: Power measurement range (Decibel milliwatts): Standard wavelength (Upstream) Spectral passband/pass zone (nm): 1539 to 1565. Standard wavelength (Downstream): 1550.

Performance Parameter: Insertion Loss (Decibel): less 1.5 Accuracy (Decibel): +/-0.2 Return Loss: Greater than 30dB. Linearity (Decibel): +/-0.1 Display Resolution (Decibel milliwatts): 0.01 Polarization (dB): Less than 0.25 Threshold sets: 1.

Technical Specifications: Auto Power Off: Yes. Power Supply: AAA Battery. Battery life (Hours): 90-100. Optical Connectors: SC/APC, FC/APC. Data Storage: 100. Optional Accessories: Male FC to Female LC Adapter. Measurement Unit: dB, dBm.

Environmental and Mechanical: Relative Humidity (%): Less Than or equal 85. Storage temperature range (Deg. Celsius): -20 to +70. Operating temperature range (Deg. Celsius): -10 to +60.

Warranty: Warranty Period: 2 Years.

IP Enclosure Ratings: IP Rating: IP54

Packaging: Battery & Carry Pouch.

LCD based passive optical power meter: General specifications: PON Technology supported, detector type,

8 Schedule A3 Item No. 13

INTEL i5 All In One PC

Processor: Make INTEL Core i5, Processor Generation 10th or later, Motherboard INTEL B series B460 or later, Graphics Integrated, Operating System Pre loaded Windows 10 Professional or better, Memory DDR4 8GB 2666MHz or better, Storage HDD SSD 1000GB @7200 rpm or better, Display 21.5 inches or more Non Touch 1920X1080 Pixels, Webcam, Integrated speakers, 1Nos Ethernet Port, 2Nos USB or more, Power External 120Watt, Input Devices Mouse Optical Wired Keyboard Wired Standard, Warranty 3 years.

9 Schedule A3 Item No. 14

Mono Color Laser A4 paper size Computer Printer.

Specification: Cartridge Technology: Composite Cartridge. Printing Technology: LASER. Type of printing: Mono. Paper Size: A4.

10 Schedule A3 Item No. 15

L-3 Switch

Switching capacity: 92 Gbps on 24-port Gigabit Ethernet model 640 Gbps on 24 port Multigigabit Ethernet model 640 Gbps on 24-port 10 Gigabit Ethernet SFP+ model

Stacking bandwidth: 480 Gbps

Total number of MAC addresses: 32,000

Total number of IPv4/IPv6 routes (ARP plus learned routes): 24,000

Flash: 2GB (4 GB 24-port SFP+ models)

VLAN IDs: 4,000

Total Switched Virtual Interfaces (SVIs): 1,000

Jumbo frame: 9198 bytes

Total routed ports per 3850 stack: 208

Make: CISCO/HP/ALCATEL/TEJAS

11 Schedule A3 Item No. 16

EMS SERVER

Shall support profile based authorization, graphical, geographical, hierarchical and domain based network view, inventory management, service profile management.

Configuration management: Creation, deletion, update and viewing of the managed network topology data, provision / un Provision services on any NE, Restart NE's, cards and ports, creation / deletion of NEs into / from the NE management domain, NE equipment configuration, including equipment protection to cards and ports, activating / deactivating / forcing / locking protection switching, error detection thresholds, Ethernet bandwidth management.

Performance monitoring: O-demand and automated. Periodic reporting (including daily weekly and monthly) of performance data alarm and event monitoring.

Security management: A privileged operation requires a login password, reporting of all login logout attempts in a security log file, domain level security.

Database backup and restore: Support for a multi-user accessible database server, Database management software supports system data, software version and database backup.

Loopback Management and Diagnostic Management:

Network monitoring: Auto-discovers and notifies in real time the insertion and removal of any physical card in an NE or of ONU/ONT to FTTH network. It also reports the usage of card resources and keeps track of network inventory, reporting changes in chronological order.

EMS: EMS software and basic license for **1500 nodes**.

Configuration: i7 Gen 10 or latest, processor speed 3.1Ghz or above Hard Disk 1TB, RAM 8GB DDR4 Graphic card 2GB or more, pendrive 64GB each 2Nos. USB Port 3 or above HDMI Port wireless mouse and key board Display Monitor 21" FHD or higher (1920X1080) Original Licensed Win 10 and MS Office. Make HP/DELL/LENOVA 1KVA UPS

12 Schedule A3 Item No. 17**8 Port GPON Optical Line Terminal Unit (OLTE)**

Ports: 8 GPON ports, 4 GE Optical / Electrical Uplink ports, 2 X 10G Uplink.

Features: ITU-T G.984.x COMPLIANT, supports up to 128 or max 512 ONT / ONU, Max transmission distance 20 Km, uplink and downlink triple churning, encrypted function with 128Bits, ONU terminal legitimacy certification report, illegal ONU registration, DBA algorithm, the particle is 1Kbit/s, standard OMCI management function, fixed time upgrade, real time upgrade, ONU batch software upgrade, PON port optical power detection.

Switching capacity: 102.5 Gbps

Forward Capacity (IPv4/IPv6): 152.5Mbps

Service Features: Layer3: IPv4: ARP Proxy, DHCP Relay, DHCP Server, Static Route IPv6: ICMPv6, ICMPv6 Redirection, DHCPv6.

Service Features: Layer 2: MAC: MAC Black Holes Port MAC Limits, 64K MAC (packet exchange chip cache 2MB, external cache 720 MB). VLAN: 4K VLAN entries, Port/MAC/IP subnet based VLAN, QinQ and Flexi QinQ (Stack VLAN), VLAN swap and remark.. Spanning Tree Protocol (STP): IEEE 802.1D Spanning tree protocol, IEEE 802.1w rapid STP, IEEE 802.1s multiple STP, ONU remote loop detect alarm. Ports: Bi-directional bandwidth control, static link aggregation, LACP, Port monitoring.

Security: User Security: Anti ARP spoofing, Anti ARP flooding, IP source guard, IEEE 802.1x & AAA / Radius authentication, IP source guard create, IP VLAN, MAC Port Isolation MAC Address binding to the port and MAC address filter. Device Security: Anti-DOS attack (such as ARP, Synflood, SMURF, ICMP attack, ARP, Detection worm and MSblaster worm attack, SSHv2 Secure Shell, NMP v3 encrypted management, Security IP login through TELNET. Network Security:

User based MAC & ARP traffic examination, restrict ARP traffic of each user and force-out user with abnormal ARP traffic, Dynamic ARP table based binding, IP, VLAN, MAC and Port Binding.

Reliability: Loop Protection: ERRP (Recovery time less than 50msec) loopback detection. Link Protection: RSTP / MSTP (Recovery time less than 1msec), LACP (Recovery time less than 10msec). Device Protection: 1+1 Power Hot Backup.

Maintenance: Network Maintenance: GPON OMCI, Ping and Trace Route, Port real-time, utilization and transmit/receive statistics based on TELNET.

Device Management: CLI, Console Port, TELNET, SNMPv1/v2/v3, RMON (Remote Monitoring) 1, 2, 3 ..9 groups MIB, NTP, Saturn NMS.

Power Supply: AC Mains 90 -264 V, 47 / 63 Hz DC -36 - -76 V.

Operating Temperature: -10. To 65 deg. C.

Relative Humidity: 10% - 90% non-condensing.

On Site OEM Warranty (In Years): 3.

13 Schedule A3 Item No. 19

C++ Fiber 20Km SFP

14 Schedule A3 Item No. 20

ONT/ONU

PON Port: GPON 1*GPON port or more, FSAN G.984.2 Standard, Class B+ Downstream Data Rate:2.488Gbps EPON: 1*EPON optical port, 1000BASE-PX20+ Symetric 1.25Gbps upstream/downstream SC single mode fiber Wavelength: Tx 1310nm, Rx 1490nm Tx Optical Power: 0~4dBm Rx Sensitivity: -27dBm Saturation Optical Power: GPON: -8dBm; EPON: -3dBm. WiFi AP upto 1200Mbps wireless connectivity LED indicators for Link and Activity.

LAN Port: 10/100M or 1000M auto-negotiation RJ45 connector, Auto MDI/MDI-X Full/half duplex mode, 100m distance

Telephone Port: RJ-11 voice ports,1Km distance maximum 1 or 2 REN per RJ11 port, Vrms^50V Support Call ID / Call waiting / Call forwarding / Call Transfer / 3-way calling and T.38 FAX

External antennas WEP, WPA WPA2

Power Supply: External 12VDC power adapter

Environment: Work Temperature: 0~50C Storage Temperature: -40 ~ 85C Work Humidity: 10%~90% no-condensing Storage Humidity: 5%~95% No-condensing.

AP steering, Band Steering Multiple SSIDs supported, End user management via web interface Reset button for factory default setting of the route **OEM should have valid TEC certificate.**

ONT/ONU should work other OEM OLT (interoperability)

15 Schedule A3 Item No. 26

Fusion Splicer Machine

Specifications: Single Fiber Fusion Splicer Machine Description and Specifications :- 1) Type- Single Fiber Fusion, Splicer 2) Splicing method- Arc Splicing 3) Splicing Mode- Auto 4) Alignment Mode- Core to Core Alignment (PAS- Profile Alignment System) 5) IP Protection- Minimum IP 64 6) Applicable Fibers- Single Mode (SM),Multi Mode (MM) 7) Fiber Count-1 8) Minimum Fiber Cleave Length-8 millimeter 9) Maximum Fiber Cleave Length-16 millimeter 10) Protection Sleeve length- 60 millimeter 11) Average Splice Loss for Single Mode (SM) Fiber (dB)- 0.02 decibel 12) Average Splice Loss for Multi Mode (MM) Fiber (dB)- 0.02 decibel 13) Average Splice Loss for Dispersion-Shifted (DS) Fiber (dB)- 0.04 decibel 14) Average Splice Loss for Non-Zero Dispersion -Shifted (NZDS) Fiber (dB)- 0.04 decibel 15) Return Loss for joined fiber-60 decibel 16) Electrode Life (in

Splices)- 3000 atleast 17) Tension Test / Pull Test attachment included in the scope of supply-Yes 18) Tensile load- atleast 2 Newton 19) Fiber image magnification for viewing X or Y axis separately (Max)- atleast 500X 20) Fiber image magnification for viewing X and Y axes simultaneously- atleast 360X 21) Type of Display- Touchscreen Color LCD 22) Display Size- 5.0 to 5.9 inches 23) Storage Capacity in terms of Splice results- atleast 10000 24) Internal Storage Capacity(GB)- Atleast 8 25). Connectivity interface-USB 26) Power Source- Rechargeable Battery 27) Battery Chemistry- Li-Ion 28) Suitable Adapter to be supplied to make the equipment Work on 230 V %B1 10 %, 50 Hz- Yes 29) Carry Case included in the scope of supply-Yes 30) List of Items and Quantity of each item included in the offer- All standard accessories 31) Camera- CMOS Camera 32) Warranty on Equipment-2 year minimum 33) Warranty on Probe Electrode-12 month minimum.

Along with Splicing Tool Kit consisting of: Carrying Case, Fiber Cable Stripping Tools, High Precision Fiber Cleaver, Cleaning Supplies, Other Utility Tools and Supplies.

16 Schedule A3 Item No. 27

Optical Time Domain Reflector (OTDR) Machine

Specifications: Single Mode OTDR Machine -01 no Specifications and special Conditions :- 1) Fiber Compatibility- Single Mode 2) Central Wavelength (nm)- 1310 & 1550 for Single Mode 3) Wavelength Tolerance (%B1)-atleast 20 nanometer 4) Dynamic range@ Max Wavelength-32 decibel 5) Event dead zone - Maximum-0.8 meter 6) Attenuation dead zone - Maximum-5 meter 7) Maximum Display Distance Range-256 kilometer 8) Pulse width Range-3 to 20000 for Single Mode/Live Fiber Testing 9) Distance Measurement Accuracy (%B1)-6 meter 10) Reflection Detection Accuracy (%B1)-(%B1 4) dB for Single Mode or better 11) Linearity (dB/dB) (%B1) - (0.05) 12) Sampling points- at least 250000 13) Measurement time- User Selectable -4f Display- Colour Display, LCD, TFT, Daylight Readable Display, Touch Screen, Backlit Display 15) Display Size- atleast 5 inch 16) Connectivity interface-USB 17) Internal Storage OTDR traces- at least 50000 18) External Storage / Memory Stick Slot provided- 19) Integrated Stabilized Light Source- Yes 20) Light Source Wave Length- Same as OTDR 21) Modulation- CW, 270 Hz, 1 kHz, 2 kHz 22) Optical output power- (- 6) dBm for Single Mode 23) Optical output port- On OTDR Port 24f Power Source- Internal / Removable- Rechargeable Battery 25) Battery Capacity (mAh)- atleast 6000- Li-Polymer 26) Wave Length Range (VFL/VSL)- 650 nm %B1 20 nm 27) Output Function (VFL/VSL)- CW 28) Maximum Optical output power (Peak) (VFL/VSL) - dBm- (- 3) dBm or more 29) Laser Safety of VFL/VSL as per IEC 60825-1 latest or equivalent international standard- CLASS 3R 30) Built-in Power Meter- Yes 31) Power Meter input port- On OTDR Port 32) Wavelength Range-1200 nm to 1700 nm 33) Accessories inclusive in the Scope of Supply - DC vehicle battery-charging adaptor, Carry Case 34) WARRANTY-2 years Minimum 35) CERTIFICATION 36) Conformance to Safety requirements as per IEC 61010- 1 latest or equivalent international standard-Yes 37) Conformance to EMC requirements as per IEC 61326-1 latest or equivalent international standard- Yes

17 Schedule A3 Item No. 38

2 KVA Online UPS

Generic: 2.0 KVA Floor Standing, Switching Technology IGBT-PWM, Input Voltage 160 – 260 50Hz AC Single Phase, Output Voltage 230 V AC +/- 1% Single Phase Pure Sinewave AC, Warranty Of UPS 2 years. Battery / Backup Bank: With Battery Backup 120 minutes SMF-VRLA Stationary Lead Acid Battery with tubular positive plate in monoblock container confirming to IS: 13369; 1992 or Later Make EXIDE/QUANTA/OKAYA or better with 2 years battery warranty by manufacturer with Battery Rack along with connectors and connecting cables included as accessories.

Inbuilt Isolation Transformer: Without, Performance / Functional: Greater Than or Equal 90% & Less Than 94%, Power Factor Load Supported: 0.8 or better.

Metering: Input Voltage, Output Voltage, Input Current Output Current, Input Frequency, Output Frequency, Input Power, Output Power, Input Power Factor, Output Power Factor.

Alarms and Indications: Indicator for battery charging and discharging, Indicator for Low Battery Voltage with Audible Alarm, Alarm for Low Battery, Alarm for Over temperature. Intended Application: Network IT Equipment.

18 Schedule A3 Item No. 39

0.5 KVA UPS with AVR

Generic: 0.50 KVA Rating MOSFET-PWM Technology, Backup 15 Minutes Minimum on Full Load. Battery Type: SMF-VRLA inside enclosure of UPS 7Ah capacity Warranty of battery from the date of delivery 1 Year minimum. Rated Output: Single Phase Sinewave 230V AC 50Hz Harmonic distortion less than 3%, Input Voltage 160-280V AC Single Phase, Under Voltage Protection Input Voltage Less Than 160V AC.

Certification / Test Report: Required

19 Schedule A3 Item No. 41.

24 Port VDSL2 IP-DISLAM

Conforming to RDSO/ SPN/TC/89/2008 Rev. 0

The IP-DSLAM shall have the capability to provide and support, at least, following services, interfaces and protocols –

1. Plain Old Telephone Services (POTS)
2. ADSL/ADSL2/ADSL2+:ITU-T recommendation G.991.2, G.992.3, G.992.5
3. Fast Ethernet Ports
4. Gigabit Uplink Ports (Dark Fiber -Optical 10Km. / Electrical)

The ADSL transmission unit line shall simultaneously contain the following: • A number of downstream frame bearers, • A number of upstream frame bearers, a baseband POTS/ISDN duplex channel, • ADSL line overhead for framing, error control, operations and maintenance. ADSL2+ system shall support net data rates up to 16Mbit/s in downstream direction at a minimum and up to 800 Kbit/s in upstream direction (at a minimum). However actual possible data rate shall be governed by line SNR conditions. Also the data rate may be configurable through EMS. The distance between central office terminal and remote

End Of Chapter-III

CHAPTER – IV

Specifications for Execution of Works

4.0 General specification for Installation and Execution part:

All of the execution works shall be done as per extant practices on Central Railway, site conditions and instructions of the site in-charge nominated by Railways.

The Contractor shall not execute the work that may interfere with train traffic until adequate protection has been arranged as per the instructions of the site in charge.

Contractor will be himself responsible for the safety of his personnel during execution of work. Railway will not be responsible for making payment for any type of compensation.

The Contractor shall make his own arrangement for accommodation for his staff during execution, testing and commissioning period.

Power supply will be given for installation work including battery charging; wherever available as per railway standard practice and contractor will have to pay necessary charges as per rules.

Non-availability of Power will not be a reason for the slow progress of work. If power is not available the contractor shall make his own arrangement for portable Genset /electrical power.

The work includes-

- Installation of router switches LAN Network, FTTH equipment, Fixing/Laying of PVC pipes, laying of Telecom cables viz. 6 fiber cable, CAT-6 Cable, power cable.
- Installation, fixing of Racks.
- Installation, Testing, Commissioning of Network Video Recorder (NVR) and its softwares as chapter 3.

Specification for Installation, testing and commissioning of NVR:

- A.** All of the items pertaining to NVR like NVR, Monitors, associated housing racks and accessories shall be installed in the server Room of the Station or at any location as per instructions of the Rly. Site In-charge.
- B.** The software should be designed as per Specification mentioned in tender Schedule
- C.** Station specific Relevant Software shall be pre-installed on the NVR
- D.** All necessary physical connection with switches etc. Shall be made
- E.** All types of applications like audio recording at thana, display etc. Shall be checked and tested

Specifications and Requirements for placing of various pipes and cable ducts/HDPE duct/RCC ducts in trenches:

All the pipes/ducts to be placed in the trenches for laying of cables shall be transported to site by the contractor by its own means.

All the trenches shall be properly and thoroughly cleaned before laying the pipes/ducts

While laying of ducts it shall be utterly cared that there is no damage to the duct due to mishandling

If more than one pipe or ducts are to be laid in the same trench then both should be laid side by side.

After cable laying the duct should be refilled with concrete material as per the proportion of 1:3:6 and grouting the ends at either side of the rocky portion using concrete mixture with Contractor's own cement and other materials

For laying of **HDPE** pipe/duct in trenches, supply and pulling of nylon rope through trenches at different places should be as per the directives of the engineer at site. HDPE pipe will be supply by railway

Protection of cable at various places.

Exposed cable is to be protected by doing proper concreting. The concreting mixture shall be in proportion of 1:3:6 of cement, stone and sand respectively. The depth of the concreting is 0.15 mtrs and width is 0.3 mtrs. Cable is to be protected with Concreting where appropriate standard depth of cable laying is not possible to achieve i.e. in rocky areas.

The cable to be drawn through HDPE or G.I Pipe or half cut RCC as per site conditions and as directed by Railway Engineer at site.

Specifications and requirements for Digging of Trenches in the Soft Soils, hard soil, Asphalted area and Track Crossings:

The contractor shall depute proper and competent supervisor for trenching and cable laying work.

Before starting the trenching foot by foot survey shall be done along-with the Railway's representative.

The cable route shall be jointly finalized by the contractor's and Railway's representatives.

The proposed cable route plan shall be submitted to the Railways and it shall be got approved (also by the engineering and electrical branches).

In addition to the main cable plan, a track crossing plan shall also be got approved before starting the work.

The cable shall be laid at the Railway's boundary (one meter inside the outermost boundary).

While trenching it shall be kept in mind the depth of the trench shall be **1.2 meter deep (or as specified in tender schedule) and 300mm** wide in normal soil/strata until and otherwise specified by the engineer in charge. **All the payments shall be made in cubic meter accordingly.**

While cutting of roads/platforms for depth of 300mm x 300mm width, restoration of the same should be made after laying of RCC/GI/DWC pipes.

While trenching the contractor shall clear the temporary obstructions like roots of tree if any, some foundation if any. If it is not feasible to clear the route the route shall be diverted accordingly with the prior permission of the engineer in-charge.

All excavated earth shall be staked by the contractor away from the track and not on ballast or shoulders.

This work also includes covering of cable laid in trench by loose soil for a layer of 50mm thickness approximately before covering by stones/bricks, clearing of route, bushes etc.

The work shall be done as per the extant practice on Central Railway and instructions of Railway Engineer at site.

In case depth of trench is not achievable due to site conditions proportionate payment will be made.

In case digging is to be done in between tracks, the excavated earth shall be carried manually beyond the adjacent track/tracks and stacked completely outside.

In case the trench gets filled up with water from the surrounding area due to rain etc., the Contractor shall have to make his own arrangement to pump it out without any extra charges payable for the same.

If during the trenching, any cable markers, obstruction such as pipes or cables or any bricks or warning covers which appear to be deliberately placed in the location is noticed, the digging should be stopped immediately and the Railway Supervisor should be called.

Further excavation will be done in his presence very carefully with the help of wire claws and digging can be further resumed only with the permission of the Engineer/Supervisor-in-charge.

Where the cable route is on uneven ground, reasonably long section of consistent grounding shall be dug, rather than following every undulation of the ground.

Before starting the trenching in the asphalted area the contractor shall get prior approval of competent authority.

During the trenching and cabling work in the asphalted areas the contractor shall cordon off the area with proper means of barricading and warning board for the user of that area.

After the cabling or the laying of suitable pipes or ducts the asphalted area shall be restored back to its earlier state of surface by proper means.

While restoring back the contractor shall take care that the level of this area must match with the nearby areas.

Before the track crossing it shall be ensured that a commencement notice shall be given to P-way supervisor.

During trenching the muck in the form of soil or ballast shall be filled in gunny bags and kept away from the track area.

After the track crossing is done and the trench is refilled, the leftover muck shall be taken far from the track area.

No muck in any form like soil shall be left in the track areas.

The contractor shall keep one additional man to look for the trains while the trenching and cabling work is being done in track areas. The duties of this person shall be to look for the trains and warn the labours working in the track areas. Railway shall in any case not be responsible for any miss-happening on the track areas.

The contractor shall ensure that all safety features have been arranged for its labour.

The contractor shall also apply for and get issue the ID card for its labour supervisor and associated labour.

Railway shall not be responsible for the staying facility of the labour during the work.

IN CASE OF ANY CONFUSION BETWEEN THE SPECIFICATIONS, DRAWING AND INSTRUCTIONS OR BETWEEN ANY TWO CLAUSES OF THE TENDER DOCUMENT THE DECISION OF ENGINEER IN CHARGE SHALL BE FINAL.

Specifications and Requirements for laying of Cables:

All the cables shall be transported to the site by the contractor by its own means.

The cables at site shall be stored properly, fully protected against harsh environmental conditions like rains etc.

All the cables shall be meggered before laying of the cables and a proper record shall be handed over to the Railway's engineer in charge.

Cable drums mounted on Jackscrew stand shall be used for cable laying to avoid any kinks or pressure on the cable during cable laying. Sufficient manpower should be arranged by the contractor to lay the cable manually so that it does not rub on the ground.

Cable shall be laid with due caution so as not to cause any damage due to rough handling.

While laying the cable, precautions shall be taken to avoid any kind of pressure on the cable.

The Cable drum should be mounted on a jackscrew stand and the cable should be pulled while laying. During this care must be taken to support the cable manually so that it does not rub on the ground and also to avoid any twist in the cable.

As a matter of practice, until and otherwise, not more than 1-2 meter of coils are left for all the cables as a loop after considering the length required for the termination.

Before the back filling is done, the cable markers will be provided in such a way as to keep the top portion visible after filling.

If the cable route markers are provided by the railways, then the same has to be placed as per further instructions.

The marker should be so placed as to be clearly visible and shall not project above rail level of the nearest track and shall not be more than 200 mm from the top surface of ground level.

There will be one cable route marker at every thirty meters interval. Additional cable markers to be provided at bends and at such other locations which will be indicated by the supervisor-in-charge.

One cable route marker shall be placed at the point of divergence.

One cable marker at either end shall be placed at each track crossing.

One cable marker at each side of culvert/bridge etc.

When Signaling and Main Telecom cables are laid in the same trench, a distance of 100 mm is to be maintained between them.

When Signaling and L.T. or H.T. power cables are placed in the same trench, they must be separated by a row of bricks (any pipe RCC/DWC) between them.

In case several cables of different Categories are laid in the same trench, these should be placed in the following order starting from the main track end, so that in case of accidents the maintenance staff may easily recognize the damaged cables from sight.

1st Main Telecom cable.

2nd Signalling Cable.

3rd L.T. Power cable.

4th H.T. Power cable.

IN CASE OF ANY CONFUSION BETWEEN THE SPECIFICATIONS, DRAWING AND INSTRUCTIONS OR BETWEEN ANY TWO CLAUSES OF THE TENDER DOCUMENT THE DECISION OF ENGINEER IN CHARGE SHALL BE FINAL.

Specifications and Requirements for Fixing/clamping of pipes on the bridges /culverts/rock cutting area/tunnel:

First all the bridges shall be surveyed before commencing this item.

After surveying it shall be jointly finalized by the Railway's and contractor's representative that what are the feasible spots where angles and channels can be provided.

The fixing of GI/RCC./PVC pipe (All material for fixing pipes such as clamps, spacers, fixing arrangements etc. should be supplied by with contractors with his own cost. Only pipe will be supplied by railways.) on culverts shall be as per Drawing given by SSE-Tele.

GI pipe on girder bridge should be fixed with suitable MS clamps at the interval of 2 Mtr with requisite Nos. of nut & bolts as per site requirement and bricks masonry work at both the end with contractor's own materials.

All the angles and channels shall be of material (MS) having thickness more than or equal to 5 mm.

The shape and size of the angles and channels shall be jointly finalized by the Railway's and contractor's representatives.

It should be kept in consideration while finalizing the size of angles and channels that there should be sufficient space extra after providing the pipes.

The plans and drawing, to fit the channels and angles on the bridge, shall also be got approved by the bridge organization of the concerned jurisdiction.

While laying the cables in the pipe/ troughings, the corners of the bridges shall be covered with solid concreting to prevent any access of the cables to the unwanted outsiders.

All the pipes shall be properly coupled through couplers.

IN CASE OF ANY CONFUSION BETWEEN THE SPECIFICATIONS, DRAWING AND INSTRUCTIONS OR BETWEEN ANY TWO CLAUSES OF THE TENDER DOCUMENT THE DECISION OF ENGINEER IN CHARGE SHALL BE FINAL.

Specification for Fixing of PVC Pipe/casing with capping and Laying of cable inside PVC Pipe/casing:

General:

Careful survey of cabling route should be made to ensure that the most suitable route is selected for execution.

Telephone cables shall be segregated from electrical cables at all intersection points.

Insulation sleeves shall be provided for telephone cables crossing electrical wires.

Items associated with the installation should be located so that they do not create a hazard to the occupants of the premises or to installation or maintenance staff

DP should be fitted in locations that minimizes the risk of damage.

Only proper tools should be employed in installation work. Any attempt to misuse any tools will result in unwanted damage or even risk getting injured.

As soon as work is completed at any access point, all internal fittings, the cover and its fixing screws should be properly secured.

A final check of all covers that have been removed should be made before leaving the premises to ensure that the covers and screws are correctly replaced.

Laying CAT6 Cable/ Patch cords:

CAT-6 cable shall be used to connect the IP equipment with the L2 switch. Proper CAT-6 RJ45 connectors suitable for cables shall be used for termination. The terminations should be conforming to industry standards and connector hoods should be provided. The patch cords should be uniformly placed. The CAT-6 cable shall be drawn in PVC conduit/Casing capping that should be properly laced and clamped at regular intervals of about 2 feet.

CAT6 patch panels should be fixed with all the fasteners in the 19 inch rack. Lacing of patch cords should be ensured and they should be laid in proper pathways wherever desired.

Laying Switchboard Cable:

Switchboard cables should be taken to MDF from the racks either through the channels on top of the 42U racks or through the floor by cutting the floor tiles. If laid through the floor, the tiles should be properly replaced and repaired to the evenness of the original floor. The MDF should be properly earthed with wire of adequate quality.

Laying Power Cable:

The Power Cable shall be terminated in a power distribution box having MCBs of 5 ampere each capacity and power socket with switch each of 15 ampere capacity. Whereas all the Power Cables coming from Equipment shall be terminated on the wall in the Equipment room / Control room near Central switch in a power distribution box having appropriate number of MCBs of 5 ampere capacity each. The phase of 230V A/C shall be extended through the MCBs whereas for neutral there shall be a common bus bar in the distribution box.

Power cables should be neatly drawn inside casing capping or conduit of appropriate dimensions across the walls. At no point in the run should there be any exposure of the cables.

The Power Cable has to be laid from the nearest source of power supply

General Laying of PVC casing capping and conduit:

The casing capping and conduits, as the case may be, should be clamped at the walls at the regular interval of 2 feet and it should be ensured that the uniformity is maintained. At bends care should be taken that there is no gap in capping. Wherever they are needed to pass

through the walls proper drilling should be done to pass and afterwards the hole should be properly filled so as to match with the original level of the wall/ceiling.

This includes supply and installation of required bends/connectors for drawing PVC pipe line,

Specification for Laying of 6-core optical fiber cable:

OFC cable shall be laid in PVC pipe / casing-capping as per route shown and instruction of site engineer of Railway.

All joints, Splicing will be done by contractor whenever required. Laying of telecom OFC cable as per normal practice of Railways and according to approved cable route plan in the excavated trench, as per site requirement and instructions of site engineer of Railway.

All connectors and coupling cables required for installation will be provided by contractor and as per instructions of site engineer of Railway.

This includes drilling holes, breaking walls for taking cables, as per site requirements and instructions of site In charge of Railways.

Specification for Fixing of DP and termination of cables

DPs shall be fixed on wall/pillar or any suitable structure and in a manner, it is designed for.

All the cables shall enter into the wall mount DP from top of the box and from the proper entry only.

The cables should not be run in front of the Krone modules.

Cables should be terminated properly in Krone modules as per requirement.

Spare cable pairs not wired to terminal should be long enough to reach any terminals and coiled around the working pairs of the same cable.

Each cable should be passed through the guides provided and follow the raceways formed by the space between modules in the following manner

Specification for Concealed wiring:

The wires are installed in 5 steps.

Step 1: Laying the electrical conduits in the slab

Step 2: Laying the electrical conduits in the wall

Step 3: Installation of IO Boxes

Step 4: Installation of Distribution Boards

Step 5: Laying of cables.

Step-1: Laying of Electrical Conduits in Slab

- Check the wall drops carefully and determine the concrete thickness.
- Check the conducting as per the service drawings and see where the termination boxes are located and how many cables need to be installed at each location.
- Take special precautions while concreting the slab
- Ensure that all the joints are watertight
- Once the slab and beam are de-shuttered, pass the GI wiring immediately. Document any choke up or alternate route for future references
- Provide the pull boxes at suitable locations
- Don't cluster the pull and junction boxes at one place. Arrange them so that they can't be seen easily from heavy movement areas as per the electrical drawings

Step-2: Laying of Electrical Conduits in Wall

- Carry out the concealed conduit work after the construction of masonry walls but before the plastering work starts.

- Once the curing of brickwork is completed, carry out the chasing work. Ideally, maintain a gap of 7 days between the two activities
- Do the wall chasing with wall cutters only as this would avoid damage to the walls
- Fix the conduits with the approved clips to ensure proper routing and wiring
- Once the conduits, boxes and accessories are fixed, fill the chiseled surface with cement mortar and chick mesh wrapped around the conduits
- Start the wall conducting activity with level marking on the wall, keeping the height above FFL(Finished floor level) in mind
- Limit the width of chasing as per the number of conduits
- The depth of chasing should be at least 10 mm from the masonry wall to have the conduit recess
- Make sure that all the horizontal conduit runs are straight at the box level. The light point conduit should run straight vertically to the switch box. Make sure no wall conduit is taken haphazardly
- Don't run power conduits near any communication line
- Run the conduits above the false ceiling with proper support. Don't rest them on the false ceiling in any case. Seal the vertical runs with open ends at the top if you have false ceiling work

Step-3: Installation of Boards Back Boxes

- Fix the concealed switchboard properly in level based on the architect's design, for example, distance and height from the finished floor level (FFL)
- Ensure that the gap between the concealed boards is uniform. Maintain the same uniformity across all the installations.
- Fix the concealed box 3 mm below the plastered surface.
- Finish the box fixing before the plastering work while doing the wall conduiting. Fill the boxes with thermocol while the plastering work is being done.

Step-4: Installation of Distribution Boards

- Conceal the distribution board before the plasterwork
- Fix the DB box in a proper line and level the recess provided in the brickwork
- Ready the box as per the design such as fixing the number of conduits entering the distribution box
- Place the PVC pipes from the given entry holes only

Step-4: Laying of cables.

0. Telephone and data cables shall be segregated from electrical cables at all intersection points.
 1. Insulation sleeves shall be provided for telephone and data cables crossing electrical wires.
 2. Only proper tools should be employed in installation work. Any attempt to misuse any tools will result in unwanted damage or even risk getting injured.
 3. A final check of all covers that have been removed should be made before leaving the premises to ensure that the covers and screws are correctly replaced.
 4. CAT-6 cable shall be used to connect the IP equipment with the L2 switch. Proper CAT-6, RJ45 connectors suitable for cables shall be used for termination. The terminations should be conforming to industry standards and connector hoods should be provided.
- Care to be taken to prevent damage while pulling the cables through conduits

General instructions for removal of all types cables and conduits:

All type of cables and conduits as instructed by site supervisor should be removed from bridges, Under platform, various offices etc in station premises.

Care should be taken not to damage other cables, railway assets while removing cables and conduits.

Cables should be properly bundled/ bunched together as per instruction of site supervisor. The release material should be transported with his own cost to the concern depot for final disposal or as instructed by site supervisor.

General instructions for removal of all types cables and conduits:

The Indicator display along with its accessories should be removed carefully so that minimum damage should occur to internal cards, Housing, fittings etc.

At most care to be taken for safety of Indicator display and its accessories. All indicators with accessories will be transported by contractor with his own cost to nearest depot as decided by railway authority.

Fixtures/ mounting arrangement should be carefully removed without any damage, so that same can be reused in future if required.

Specifications and Requirements for the Earthing of the TELECOM Equipment room:

All Consumables and Hardware:

The contractor shall provide all consumables, hardware and erection material as is required for the complete installation of the system at his own cost as below.

These materials shall include but not limited to the following.

- i. Consumables: Drilling and metal/wood cutting accessories, soldering equipment and accessories, welding accessories like rods and gas, oil & grease, cleaning fluids, paints, cotton waste, electrical tape, etc
- ii. Hardware: Nuts & bolts, washers, screws, nails, brackets, supports, hangers, saddles, cleats, clamps etc.
- iii. Materials: Conduits and accessories, junction boxes, terminal blocks, various types of cards like USB, HDMI, VGA, RCA, Audio etc. as per site condition, connectors, lugs, ferrules, brass glands, ground wires etc

Any other material required for complete installation of the system, but not mentioned in the estimate has to be included under this item and needs to be supplied by contractor at no additional cost.

Telecom Circular No. 09/2023 Railway Board Letter No. 2021/Tele/5(2)/3-Part(1)(3425647) Dt: 12.06.2023

Guidelines for protection of cables while doing work its vicinity

1. Cable route marking for all types of cable must be made available block section wise on Railnet.
2. Before allowing the contractor to work near the tracks, the work executing agency (like SrDSTE/SrDEN/SrDEE or DyCSTE/DyCEE/DyCE etc.) shall ensure that the permission has been granted by the division to the contractor in accordance with the local instructions / JPO to work in the vicinity of the cables. Zonal railways shall devise suitable mechanism and timelines for the obtaining/granting such permission.
3. In case of works being taken up by the State Government, National Highway Authority etc., zonal railways shall devise mechanism for shifting the cables or for proper protection of cables before granting permission to work.
4. The engineering control shall keep all the information regarding any works being done near the track. S&T and electrical control shall obtain this information from engineering control. These controls shall coordinate among themselves to ensure that no work is done in the vicinity of the track without proper permission.
5. The concerned SE/P.Way/SE/Works/SE/Sig/SE/Tele SE/Electrical (TRD or G) or RailTel supervisors supervising the work of the contractor shall ensure that the existing emergency sockets are not damaged due to their importance in providing communication during accident/emergency.
6. For all new works, cable shifting should be a mandatory part of DPR and estimate. For ongoing works, Zonal Railways may sanction works for cable shifting if necessary through contingency/supplementary/revised estimate where provision does not exist. However, in case zonal railways decide not to shift cables (due to any reason) then protection of cable shall be ensured by the zonal railways during execution of the work.
7. Penalty to be imposed for damages to cable shall be as under:

Cable damaged	Penalty per location
Only Quad cable or Signaling cable	1.0 Lakh
Only OFC	1.25 Lakh
Both OFC & Quad	1.5 Lakh
Electrical Cable	1.0 Lakh

8. Penalty should be levied on the contractor when they work without permission or resort to careless working without making arrangements for protecting cables and other utilities. Based upon the local conditions and practices, zonal railway shall devise its own conditions for examining and levying penalty. For each cable cut, a joint report at the level of supervisors should be prepared on the same day and it should become the basis for levying penalty and fixing responsibility. Joint note should be forwarded by SrDSTE/SrDEE to the executive in-charge of the work. The executive in-charge of the work should act and decide on the cable cut case within 15 days under information to SrDSTE/SrDEE as the case may be. There should be provision of appeal by contractors within one month of notice for levying penalty at ADRM level. Decision of ADRM shall be final and binding upon both parties.
9. Railways will not lodge FIR with RPF in cases of works being executed by authorized contractors of Railways who have been duly permitted to execute the works.
10. Zonal Railways shall issue local instructions/JPO for protection of cables while undertaking works in the vicinity of railway tracks in line with this guideline. Zonal Railways shall also ensure that such instructions become part of their tender document

within one month of the issue of the local instructions. Suitable action against erring officials shall also be incorporated in these instructions if the same is not adhered to.

**LIST OF FOIS / UTS / PRS AND OTHER DATACOM LOCATIONS.
ANNEXURE**

Sr. No	STATION	CODE
1	AJNI	AQ
2	KHAPRI	KRI
3	GUMGAON	GMG
4	BUTIBORI	BTBR
5	BORKHEDI	BOK
6	SINDI	SNI
7	TULJAPUR	TJP
8	SELOOROAD	SLOR
9	SEWAGRAM	SEGM
10	DAHEGAON	DAE
11	KAOTHA	KAOT
12	PULGAON	PLO
13	TALNI	TNI
14	DHAMANGAON	DMN
15	CHANDUR	CND
16	MALKHED	MLR
17	TIMTALA	TMT
18	BHUGAON	BPK
19	SONEGAON	SNN
20	WAGHOLI	WG
21	HINGANGHAT	HGT
22	NAGRI	NGI
23	CHIKNI RD.	CKNI
24	WARORA	WRR
25	MAJRI	MJRI
26	BHANDAK	BUX
27	TADALI	TAE
28	BABUPETH	BUPH
29	GODHANI	GNQ
30	BHARATWADA	BWRA
31	KALMESHVAR	KSWR
32	KOHLI	KOHL
33	SONKHAMB	SNKB
34	METPANJRA	MER
35	KATOL	KATL
36	KALAMBA	KLBA
37	TEEGAON	TEO
38	CHICHONDA	CCD
39	JAULKHERA	JKR
40	BARSALI	BYS
41	MARAMJHIRI	MJY
42	DHARAKHOH	DHQ
43	BARBATPUR	BBTR
44	DHODRAMOHAR	DOH
45	KALA AKHAR	KQE
46	SAHELI	SALI
47	TAKU	TAKU
48	KIRATGARH	KRTH

49	JAMBHARA	JMV
50	BORDHAI	BXY
51	NAVEGAON	NVG
52	HIRDAGARH	HRG
53	JUNNARDEO	JNO
54	PALACHOURI	PCLI
55	IKLEHRA	IKR
56	ARVI P.O	ARVI
57	WANI	WUN
58	PUSLA	PUSA
59	WARUD	WOC
60	MORSHI	MRSH
61	MAJRI KHADAN	MJKH
62	LINGTI	LNT
63	PIMPALKUTTI	PMKT
64	KAYAR	KYR
65	SARNI	SARNI
66	UMRED	URR
67	NTPG CD	NTPG
68	GHUGUS ACC	GGs ACC

End Of Chapter-IV

Chapter-V

Annexures & Performa

ANNEXURE V

FORMAT FOR CERTIFICATE TO BE SUBMITTED / UPLOADED BY TENDERER ALONG WITH THE TENDER DOCUMENTS

I..... (Name and designation)** appointed as the attorney/authorized signatory of the tenderer (including its constituents), M/s..... (hereinafter called the tenderer) for the purpose of the Tender documents for the work of as per the tender No. of (Railway)**, do hereby solemnly affirm and state on the behalf of the tenderer including its constituents as under:

1. I/we the tenderer (s) am/are signing this document after carefully reading the contents.
2. I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
3. I/we hereby declare that I/we have downloaded the tender documents from Indian Railway website www.ireps.gov.in I/we have verified the content of the document from the website and there is no addition, no deletion or no alteration to the content of the tender document. Incase of any discrepancy noticed at any stage i.e. evaluation of tenders, execution of work or final payment of the contract, the master copy available with the railway Administration shall be final and binding upon me/us.
4. I/we declare and certify that I/we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
5. I/We also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon me/us.
6. I/We declare that the information and documents submitted along with the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents, submitted by us.
7. I/we certify that I/we the tenderer(s) is/are not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of submission of bids, either in individual capacity or as a HUF/ member of the partnership firm/LLP/JV/Society/Trust.
8. I/we understand that if the contents of the **Certificate** submitted by us are found to be forged/false or incorrect at any time during process for evaluation of tenders, it shall lead to forfeiture of the Bid Security besides banning of business for a period of upto **two** year. Further, I/we (insert name of the tenderer) **..... and all my/our constituents understand that my/our offer shall be summarily rejected.
9. I/we also understand that if the contents of the **Certificate** 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, along with forfeiture of Bid Security/Security Deposit and Performance guarantee besides any other action provided in the contract including banning of business for a period of upto **two** year.
10. I/We have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India and certify that I am/We are not from such a country or, if from such a country, have been registered with the competent Authority. I/We hereby certify that I/we fulfil all the requirements in this regard and am/are eligible to be considered (evidence of valid registration by the competent authority is enclosed)

SEAL AND SIGNATURE
OF THE TENDERER

Place:

Dated:

**The contents in Italics are only for guidance purpose. Details as appropriate are to be filled in

suitably by tenderer.

This affidavit is to be also has to be given by each member of Joint Venture

Note: This is a mandatory certificate for all bidders.

Note: This affidavit is to be given by each member of JV

ANNEXURE-V(A)

Reference -Para 6.1 of ITT

(This certificate is to be given by attorney/authorized signatory/each member of Partnership firm/Joint Venture (JV) / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc.)

I/We.....(Name), attorney/authorized signatory of the
..... (constituent firm/constituent partner) and member/partner of the
.....(tendering firm) hereby solemnly affirm and state as under:

1. I/we certify that (constituent firm/constituent partner) is/are not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of submission of bids, either in individual capacity or as a HUF/ member of the partnership firm/LLP/JV/Society/Trust.
2. I/We have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India and certify that I am/We are not from such a country or, if from such a country, have been registered with the competent Authority. I/We hereby certify that I/we fulfil all the requirements in this regard and am/are eligible to be considered (evidence of valid registration by the competent authority is enclosed),

SEAL AND SIGNATURE
OF THE CONSTITUENT FIRM/CONSTITUENT PARTNER

Place:
Dated:

ANNEXURE-VIB

Reference -Para 10.2 & 17.15.2 of Tender Form (Second Sheet) of Annexure I of ITT

Each Bidder or each member of a JV must fill in this form separately:

NAME OF BIDDER/JV PARTNER:

Annual Contractual Turnover Data for the Previous 3/4 Years (Contractual Payment only)			
Year	Amount Currency	Exchange Rate	Indian National Rupees Equivalent
Average Annual Contractual Turnover for last 3 years			

1. The average annual contractual turnover shall be calculated as an average of "total contractual payments" in the previous three financial years. However, in case balance sheet of the previous year is yet to be prepared/ audited, the audited balance sheet of the fourth previous year shall be considered for calculating average annual contractual turnover.
2. The information supplied shall be substantiated by data in the audited balance sheets and profit and loss accounts for the relevant years in respect of the bidder or all members constituting the bidder.
3. Contents of this form should be certified by a Chartered Accountant duly supported by Audited Balance Sheet duly certified by the Chartered Accountant.

SEAL AND SIGNATURE OF THE BIDDER

Certified that all figures and facts submitted in this form have been furnished after full consideration of all observations/notes in Auditor's reports. _____

(Signature of Chartered Accountant)

Name of CA: _____

Registration No: _____

(Seal)

Note: This is a mandatory certificate for all bidders with audited balance sheet certified by a CA.

ANNEXURE-VI_____**RAILWAY****CONTRACT AGREEMENT OF WORKS****CONTRACT AGREEMENT NO.** _____ **DATED** _____

ARTICLES OF AGREEMENT made this _____ day of _____ 20____
between President of India acting through the Railway Administration hereafter called
the "Railway" of the one part and _____ herein after called
the "Contractor" of other part.

WHEREAS the Contractor has agreed with the Railway for performance of the
works _____ set forth in the Schedule/Bill(s) of Quantities hereto
annexed upon the Standard General Conditions of Contract, corrected upto latest
correction slips/ updated with correction slips issued up to date of inviting tender or as otherwise
specified in the tender documents and the Specifications of _____ Railway
corrected upto the latest correction slips and the Schedule of Rates of _____
Railway, corrected upto latest correction slips / _____ updated with correction
slips issued up to date of inviting tender or as otherwise specified in the tender documents and the
applicable Standard Schedule of Rates (SSOR) of _____ updated with correction slips issued
up to date of inviting tender or as otherwise specified in the tender documents and the **Special
Conditions and Special Specifications, if any and in conformity with the drawings here-
into annexed AND WHEREAS** the performance of the said works is an act in which the
public are interested.

NOW THIS INDENTURE WITNESSED that in consideration to the payments to be
made by the Railways, the Contractors will duly perform the said works in the said
schedule/Bill(s) of Quantities set forth and shall execute the same with great promptness,
care and accuracy in a workman like manner to the satisfaction of the Railway and will
complete the same in accordance with the said specifications and said drawings and
said conditions of contract on or before the _____ day of _____ 20____ and
will maintain the said works for a period of _____ Calendar months from the
certified date of their completion and will observe, fulfil and keep all the conditions
therein mentioned (which shall be deemed and taken to be part of this contract, as if
the same have been fully set forth herein), AND the Railway, both hereby agree that if
the Contractor shall duly perform the said works in the manner aforesaid and observe
and keep the said terms and conditions, the Railway will pay or cause to be paid to the
Contractor for the said works on the final completion thereof the amount due in respect
thereof at the rates specified in the Schedule /Bill(s) of Quantities hereto annexed.

Contractor _____ (Signature)

Address _____

Date _____

Signature of Witnesses (to Signature of Contractor) with address:

Witnesses:

Railway: Designation _____

(For President of India)

Date _____

ANNEXURE VII**PROFORMA FOR PREVIOUS EXPERIENCE OF CONTRACT/CREDENTIALS**

Sr. No.	Name of similar work carried out in the past or being executed at present	Place &with which authority	Tender Cost	Time taken for completion of work	
				As stipulated in the Contract	Actual Time taken
1	2	3	4	5	6

Signature _____

Please fill in the questionnaire below:-

Give details of your previous experience in the manufacture and how long you have been manufacturing the stores as listed in this tender.

Give particulars of the present production capacity of the factory where the stores would be manufactured. (Please give details of license and the capacity for which you are licensed by Government).

Give the names of your Bankers and their reference.

Give details of the registration number, if you are registered for supply to Indian Railways (or any other Railway), DGS & D and NSIC, and the class of stores for which you are registered.

NOTE: This form shall be filled precisely and with full details.

ANNEXURE VIII**PROFORMA FOR STATEMENT OF DEVIATIONS**

- (1) The following are the particulars of deviations from the requirements of the instructions to Tenderers, General and Special Conditions of contract-(Chapters of Tender DocI)

Clause	Deviation	Remarks (including justification)

Signature and seal of the
Manufacturer/Tenderer.

Note: Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations".

ANNEXURE IX**TENDER NO.** _____**Requisition-cum-receipt for the material**

Requisition-cum-receipt for the material

Sr. No. _____

Date: _____

Please _____ arrange _____ to _____ supply _____ the _____ bearer _____

Description of materials required

Qty	Nos.	in words	In figures

at (place of supply) _____ Station _____

for sub-section between Km. _____ to Km. _____ against Contract No. _____

Signature of the Contractor/Contractors

(Specimen signature)

(B) Received the above material Qty. _____ (fig) _____ as mentioned above.

On _____ received in good condition and I/We undertake the responsibility for replacement / payment of/ for the same as shall be deemed fit by the Railway in terms of Special Conditions

Station:_____
Signature of the Contractor(s)

Date:

ANNEXURE X**INDEMNITY BOND**

Indemnity Bond for safe custody of Railway material to be supplied to
M/s. _____ under Tender no. _____

We, M/s. _____
(hereinafter called the Contractor) do hereby undertake that we shall hold in our custody for and on behalf of the President of India acting in the premises through the General Manager, Central Railway or for him all Railway materials which have been handed over to us against the contract for Tender no. _____ dt. _____ for the work of _____ " by the Railway for the purpose of execution of the said contract until such time the materials are duly installed and/or erected or otherwise handed over to the Railway.

We shall be entirely responsible for the safe custody and protection of the said materials against all risk till they are duly delivered as installed and/or erected equipment to the Railway or as directed otherwise and shall indemnify the Railway against any loss, damage or deterioration whatsoever in respect of the said materials. The said materials shall at all time be opened to Inspection by any Officer authorized by the General Manager, Central Railway or his nominee.

Should any loss, damage or deterioration of materials occur or surplus materials disposed off and a refund becomes due, the Railway shall be entitled to recover from us the full cost and compensation determined in terms of the contract for such loss or damage, if any, along with the amount to be refunded without prejudice to any other remedies available to him by deduction from any sum due or any sum which at any time thereafter becomes due to us under the said or any other contract.

In the event of any loss or damage as aforesaid the assessment of such loss or damage and the assessment of the compensation therefore would be made by the President of India acting through the General Manager, Central Railway or his authorized nominee shall be final and bind upon us.

Signed at _____ on this day of _____

Signature of Witness: _____

For & on behalf of M/s. _____

Name of Witness in BLOCK LETTERS: _____

ADDRESS: _____

ANNEXURE XI**PROFORMA FOR BANK GUARANTEE BOND**

**The President of India,
Acting Through the
Sr.DFM,
Nagpur -440 001.
Central Railway**

1. In consideration of the President of India (hereinafter called "the Government") having agreed to accept from.....(hereinafter called "the said contractor/s"), under the terms and conditions of an Agreement/Acceptance letter datedmadebetween.....and(hereinafter called "the said Agreement") the Performances Guarantee for the due fulfilment by the Contractor/s of the terms and conditions in the said Agreement on production of Bank Guarantee for Rs.....(Rupees.....only) we,.....(indicate the name of Bank thereafter referred to as "the Bank") at the request ofcontractor/s do hereby undertake to pay the government an amount not exceeding Rs.....against any loss or damage caused to or suffered by or would be caused to or suffered by the Government by reason of any breach by the said Contractor(s) of any of the terms or conditions contained in the said Agreement.
2. We,..... (indicate the name of Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on demand from the Government stating that the amount claimed is by way of loss or damage caused to or suffered by the Government by reason of breach by the said contractor/s of any of the terms or conditions contained in the said agreement or by reason of the contractor/s failure to perform the Agreement , any such demand made on the bank shall be conclusive as regards the amount due and payable to the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....
3. We undertake to pay to the Government any money so demanded notwithstanding any dispute or dispute raised by the contractor/s/supplier(s) in any suit or proceeding pending before any Court or Tribunal relating thereto liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s)/supplier(s) shall have no claim against us for making such payments.
4. We..... (indicate the name of the bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement, including Maintenance/Warranty Period, and that it shall continue to be enforceable till the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharge or till office/Department. Ministry of Railway certifies that the terms and conditions of the Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharged this guarantee, unless a demand or claim under this guarantee is made on us in writing on or before thewe shall discharge from all liability under this guarantee thereafter.
5. We,.....(indicate the name of the bank) further agree with the Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone from any time or from time to time any of the powers exercisable by the Government against the said contract and to forebear 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, extension being granted to the contractor/s for any forbearance act or commission on the part

of the Government or indulgence by the Government to the said contractor/s or such any matter or thing whatsoever which under the law relating to sureties would , but for this provision, have effect of so relieving us.

6.This Guarantee will not be discharge due to the change in the constitution of the bank or the Contractor(s)/Suppliers(s)

7. We,_____ (Indicate the name of Bank).....undertake not to revoke this guarantee during its currency except with the previous consent of the Government in writing.

Date this.....day of20.....

For

(Indicate the name of Bank)

Signature of Tender

Divisional Railway Manager (S&T),

Central Railway, Nagpur Division– 440001,

For and on behalf of President of India.

Annexure –XII**Certificate of no relative being an employee of Central Railway**

I/We the under signed hereby solemnly declare and certify that I/ We do not have any of our relative/relatives employed in the Indian Railway (Signal and Telecom department) except the names mentioned herein under:

1.....

2.....

3.....

And so on

Note:- Names , Designation , Name of office, Headquarter of the tenderer's relative in Indian railway (Signal and Telecom Department) to be mentioned by the tenderer/ tenderers in 1,2, 3 and so on above.

Signature of Tenderer / Tenderers

ANNEXURE-XIII**Format for authorization letter from OEM(s).**

(The authorization letter, printed on the original stationery of the OEM, is to be submitted by the Bidder along with the Bid as a requirement of Eligibility Criteria)

Ref. No:

Date : _____

To,

**Divisional Railway Manager (S&T),,
Central Railway, Nagpur –440 001.**

Dear Sir,Sub: - Tender Enquiry for (Name of Work)

With reference to the Tender Enquiry for (Name of work)

_____ this is to certify that we (**name of manufacturer & address**) authorize (**name & address of participating bidder**) to include equipments manufactured by us in their bid. We undertake the responsibility to render all kind of repair & maintenance support to the bidder as mentioned in the Tender Document in case a contract is awarded to M/s. (**name of the bidder**) based on their Bid and subsequent confirmations, if any, submitted by them to you.

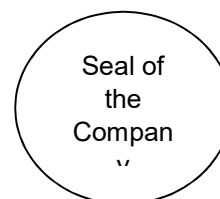
We request you to kindly consider the bid submitted by (**name of the bidder**) for execution of the aforesaid work including supply and installation of equipment manufactured by us.

(Signature)

Name of the Person : _____

Authorized Signatory

Place : _____



ANNEXURE XIV**CHECKLIST OF ITEMS TO BE COMPLIED BY THE TENDERERS WHILE SUBMITTING THE OFFER****Name of Tenderer:****Name of Work:**

Sr. No.	Description of Item	Chapter/Clause of Tender Document	Compliance (Yes / No / Not Applicable)	Remarks if any
1.	Have you paid the required cost of tender document & Bid Security in prescribed and acceptable form as instructed on www.ireps.gov.in	As per NIT Clause		
2.	<u>For Two Packet System only:</u> Have you submitted bid online at E-Tender portal on IREPS. Note:- With bid the tenderer will upload scanned copies of documents online at E-Tender portal on IREPS while submitting their offer. (i.e. Technical Bid & Financial Bid) online at E-Tender portal on IREPS.	Not applicable.		
3.	Have you attached the Tender form (First Sheet) duly filled & signed by the contractor & Witnesses ?	Chapter – 1 of Tender Document		
4.	Have you submitted covering letter signed & complete in all respect. Giving details of the firm like Name, Type of Firm (Pvt. Ltd., Partnership, JV etc.), Complete Address with PIN code, Contact details with E-mail ID etc.?	As per GCC Clause		
5.	Have you furnished the credentials to establish the eligibility? The documents required for ascertaining Technical & Financial capability as Specified in Clause 1.1.6.	Clause 1.1.6 & 1.8.1 of Tender Document		
5.1a	Have you furnished Completion Certificate(s) regarding meeting Technical Eligibility Criteria for successful completion of Similar work in the last seven financial years, ending last day of month previous to the one in which tender is invited, from the executive of user Railway ? (with contact details of FAX, phone and E-Mail of issuing authority)	Clause 1.8.1 of Tender Document		
5.1b	Have you submitted duly filled & signed copies of completed Works to certifying Technical eligibility criteria ? This should be accompanied with certificate from user Railways.	Clause 1.1.6 & 1.8.1 of Tender Document		
5.2a	Have you furnished supporting documents for meeting Financial Eligibility Criteria? Certificates to this effect which may be an	Clause 1.1.6 & 1.8.1 of Tender		

	attested Certificate from the concerned department / client and/or Audited Balance Sheet duly certified by the Chartered Accountant etc or documents as specified in GCC with latest amendments. (Certification should be with contact details, FAX, phone and E-Mail of issuing/certifying authority):	Document		
5.2b	Have you furnished the details of year-wise contractual payment received during the last three financial years & current year duly verified by Chartered Accountant regarding meeting Eligibility Criteria in last 3 financial years? This will also be used for calculation of BID capacity of the Contractor.: No eligibility will be judged but details may be furnished.	Clause 1.1.6 & 1.8.1 of Tender Document		
5.3	Have you furnished details of works experience	Clause 1.8.1 of Tender Document		
6.	Have you submitted certificate stating that they are not liable to be disqualified and all their statements/documents submitted alongwith bid are true and factual.	Clause – 1.1.5 - Note Annexure - XIV		
7.	Have you furnished Certified copy of JV agreement (MoU) in enclosed Annexure- XX (In case of offer is from JV firm)	Clause 17 of GCC, Annexure – XX of Tender Document		
8	Have you submitted all the supporting legal Documents in Case of Partnership Firms, JV, LLP etc.? (Like Partnership Deed, Power of Attorney, Articles of Association etc.)	Clause no. 14. 15, 17 & 18 of of GCC		
9.	Have you submitted Technical Specification & Literature of the equipment and sub- systems offered along with brief outline (along with diagrams and drawings, description of the equipment and specifications)	Tender Document		
10.	Have you quoted rates as online at E-Tender portal on IREPS?	As per IREPS schedule requirement.		
11.	Have you submitted NEFT/RTGS Mandate Form ?	Tender Document		
12.	Have you submitted a Certificate no relative being as Employee of Central Railway ?	Annexure –XII of Tender Document		
13.	List of Personnel, Organization available on hand and proposed to be engaged for the subject work.	Tender Document		
14.	List of Plant & Machinery available on hand (own) and proposed to be inducted (own and hired to be given separately) for maintenance support of the system.	Tender Document		

15.	Details of set up/ technical know-how available with the Tenderer for execution of work and testing/ trouble shooting/ repairing of equipments under warranty period.	Tender Document		
16.	Have you signed on all the pages of the documents attached with the bid.	Tender Document		
17.	Have you attested all the corrections / over writings made by in the attached documents?	Tender Document		
18	Mandatory submission of Annexure V & VIB	Tender Document		

Signature of the Tenderer

ANNEXURE-XVI**NOVATION AGREEMENT**

Articles of agreement made on this day _____ in the year Two Thousand and Twenty-One between the President of India, acting through the _____ <Zonal Railway>. Administration having its office at _____ hereinafter called the 'Railway' of the first part and <____Name of the contractor____>herein after called the 'Contractor' of the second part and Indian Railway Finance Corporation Limited hereinafter called the "IRFC" of the third part having its office at _____ with GSTIN _____<GSTIN of billing unit (IRFC)>

First part, second part and third part collectively hereinafter called the 'Parties'.

Whereas the party hereto of the second part executed an agreement with the party hereto of the first part being agreement no. _____ dated _____ with contract cost of Rs. _____ for performance of _____ hereinafter called the "Principal Agreement"

Now it is hereby agreed by and between the parties that Indian Railway Finance Corporation shall be made an additional party to the Principal Agreement executed between Railway and Contractor with effect from date of this agreement.

It is agreed by and between the parties that Railway shall continue to be held responsible for all obligations, risk and liabilities, whatsoever, arising out of or in connection with the Principal Agreement and this Novation Agreement, whether during the progress of the work or after its completion.

It is further agreed and understood by and between the parties that IRFC shall be the owner of assets, if any, arising out of execution of works as defined in the Principal Agreement, except the land whose ownership shall continue with Railway. Accordingly, the invoices shall be issued by capturing GSTIN of contractor (*as the supplier*) and GSTIN of IRFC (*as the bill-to party*). Also, the contractor shall submit the invoice, issued in the name of IRFC, to Railway for processing payment by Railway to Contractor subject to applicable TDS under the Income Tax, GST or any other applicable laws.

It is further agreed by and between the parties that IRFC shall be responsible to comply with Income Tax and GST laws in relation to filing of returns.

It is further agreed and understood by and between the parties that, except for the amended obligations as mentioned above, the terms of the Principal Agreement for all kind of contractual / performance and legal obligations shall remain in full force and effect.

All the communication in relation to the Principal Agreement and said Novation Agreement, would only be between party hereto of first part and second part.

For and on behalf of the
President of India
Witness of the Signature

1. _____

2. _____

Address: _____

For and on behalf of the
Indian Railway Finance Corporation
Witness of the Signature

1. _____

2. _____

Address: _____

Signature of Contractor
<Name of Authorized signatory>

Witness of the Signature

1. _____

2. _____

Address: _____

Annexure-XVII**List of works completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited**

S N	Na me of Wo rk	Name of Organi zation for whom execut ed and Contra ct awardi ng authori ty	Contr act agree ment No. and date of Awar d	Approx. Value of contract		Date of Commence ment		Date of Completion		Period of completion		Mai n feat ures of the wor k	Rem arks
				Agree ment value	Fin al Val ue	Sche duled	Act ual	Sche duled	Act ual	Sche duled	Act ual		
1	2	3	4	5	6	7	8	9	10	11	12	13	14

Note:

- (i) Supporting documents/certificates (duly attested) from the organisations with whom worked/are working should be enclosed.
- (ii) Certificate from private individuals for whom such works are executed/ being executed shall not be accepted.

Annexure-XVIII**LIST OF WORKS ON HAND: DETAILS OF EXISTING COMMITMENTS, BALANCE AMOUNT OF ONGOING WORKS AND WORKS AWARDED NOT YET STARTED**

All works in progress and also the works which are awarded to tenderer but yet not started up to the date of opening of tender. In case of no works in hand, a 'NIL' statement should be furnished. This statement should be submitted duly verified by Chartered Accountant.

S N	N a m e o f W o r k	N a m e o f O r g a n i z a t i o n f o r w h o m e x e c u t e d a n d C o n t r a c t a w a r d i n g a u t h o r i t y	C o n t r a c t a g r e e m e n t N o. a n d d a t e o f A w a r d	A p p r o x. V a l u e o f c o n t r a c t			D a t e o f C o m m e n c e m e n t		D a t e o f C o m p l e t i o n		P e r i o d o f c o m p l e t i o n		% a g e P r o g r e s s		R e a s o n s f o r D e l a y i f a n y	M a i n f e a t u r e s o f t h e w o r k	R e m a r k s
				A g r e e m e n t v a l u e	P a y m e n t r e c e i v e d	A p p r o x. b a l a n c e t o b e r e c e i v e d	S c h e d u l e d	A c t u a l	S c h e d u l e d	A c t u a l	S c h e d u l e d	A c t u a l	P h y s i c a l	F i n a n c i a l			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

Note:

- (i) Supporting documents/certificates (duly attested) from the organisations with whom worked/are working should be enclosed.

Certificate from private individuals for whom such works are executed/ being executed shall not be accepted

End Of Chapter-V

End Of Tender Document