



South Western Railway

Tender Document

Name of the Work: Provision of Automatic signalling system in Lottegollahalli - Hosur Section of Bengaluru Division.

Tender Notice No. **B-SG-PRO_LOGH_HSRA_AUTO** Dated: 06.09.2025

Office of the
Dy. Chief Signal & Telecom Engineer / Signal (Project), Bengaluru,
South Western Railway,
2nd Floor, Rail Sanraksha Bhavan,
Bengaluru-560023.

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South Western Railway

TENDER NOTICE

E-Tender Notice No. B-SG-PRO_LOGH_HSRA_AUTO

dt. 06.09.2025

Chief Signal and Telecommunication Engineer/Projects/Bengaluru, South Western Railway, 2nd Floor, Rail Sanraksha Bhavan, Bengaluru-560023 acting for and on behalf of The President of India invites E-Tenders against Tender No. B-SG-PRO_LOGH_HSRA_AUTO, Closing Date and Time: 29.09.2025, 15:00 Hrs. Bidders will be able to submit their original/revised bids up to closing date and time only.

Manual offers are not allowed against this tender, and any such manual offer received shall be ignored.

Tender No and Date	E-Tender Notice No. B-SG-PRO_LOGH_HSRA_AUTO, Dated: 06.09.2025
Name of the Work	Provision of Automatic signalling system in Lottgollahalli - Hosur Section of Bengaluru Division.
Estimated Value of the Tender	Please ref IREPS NIT
Bid Security	Please ref IREPS NIT
Period of Completion from the Date of issue of Letter of Acceptance	24 Months.
Pre-Bid meeting	Applicable
Bidding System	Normal Open Tender Two Packet System
Tender Closing Date Time	29.09.2025/15.00 hrs
Date of Pre-Bid	11.09.2025 at 15.00 hrs
Validity of offer(days)	120 Days
Tender Document Cost	NIL

Further details, including tender documents and instructions to bidders, can be obtained from the Indian Railways e-Procurement portal at <https://www.ireps.gov.in>. **Bidders intending to participate in this tender must mandatorily register** on the IREPS website.

For complete information, terms, and conditions, bidders are advised to refer to the portal.

Dy.CSTE/Projects/SBC,
South Western Railway,
2nd Floor, Rail Sanraksha Bhavan,
Bengaluru-560023.
Email: dycstepsbc@swr.railnet.gov.in

CHAPTER -I

REGULATIONS AND INSTRUCTIONS TO TENDERERS

Guidelines for Bidder

1. The Indian Railway Standard General Conditions of Contract (IRSGCC - 2022) have been published in April 2022 with ACS-10 or the latest amendments. Intending bidders are advised to familiarize themselves with all the provisions of IRSGCC - 2022 before participating in the tender. A copy of IRSGCC - 2022 with ACS-10 or the latest can be downloaded from the documents attached with this tender.
2. The following Special Conditions of Contract (SCC) are supplementary to the “Regulations for Tenders and Contracts” of IRSGCC - 2022 with ACS-10 or the latest (Part-I), read along with up-to-date correction slips up to 15 days prior to the tender closing date (excluding the date of opening). In case of any variance between the SCC and the IRSGCC - 2022 (including correction slips), the provisions of the SCC shall prevail.
3. Availability of Bid Documents and Mode of Submission: The complete tender document is available online at www.ireps.gov.in. Tenderers are expected to thoroughly examine all instructions, standard general conditions, special conditions, relevant data, forms, terms and conditions, specifications, and schedule of quantities mentioned in the tender document.
4. Bidders are advised to regularly check the website for any addenda/corrigenda to the tender documents up to the date of online submission of bids. Such modifications must be incorporated in the bid by the tenderer.
5. Bids must be submitted online through the e-portal www.ireps.gov.in before the time specified in the tender document (as per the server clock). The department is not responsible for delays caused due to non-availability of internet connectivity or network congestion during online submission.
6. The bid documents shall include qualification information, eligibility criteria of the bidders, schedule of quantities for various schedules of work, and the terms and conditions of the tender. These can be viewed on the website www.ireps.gov.in. Scanned copies of the required documents and information, as per the compliance and checklist, must be attached with the Technical/Financial Bids as prescribed in the tender document.
7. Bids will close on the date and time specified in the Notice Inviting Tender (NIT), and will be opened online thereafter. If the scheduled date happens to be a holiday, the bids will be opened on the next working day.

8. The details and process of online submission of the tenders and relevant documents are available under the following headings on the website. All submissions must adhere to the instructions under each section:

SN	Heading
1.	NIT Header
2.	SCHEDULE
3.	ITEM BREAK-UP
4.	ELIGIBILITY CONDITIONS
	Standard Financial Criteria
	Bid Capacity
	Submission of Document Verification Certificate.
	Standard Technical Criteria
5.	COMPLIANCE
	Checklist
	Commercial Compliance
	Technical Compliance
6.	General Instructions
7.	Special Conditions
8.	UNDERTAKING
9.	Documents Attached

9. Interpretation: These "Regulations for Tenders and Contracts" shall be read in conjunction with IRSGCC - 2022 with ACS-10 or the latest, as referred to herein, and shall be subject to modifications, additions, or deletions through special conditions of contract and/or accompanying drawings, manuals, specifications, or special specifications, if any, annexed to the tender documents.

10. This chapter consists of two parts:

- Part A: Special Conditions relevant to the General Conditions of Contract (GCC).
- Part B: Additional Special Conditions.

Tenderers are advised to comply with all instructions provided in this chapter. Non-compliance may result in summary rejection of the bid.

CHAPTER-1: Part A

The following Special Conditions shall be read in conjunction with the relevant clauses of the Indian Railways Standard General Conditions of Contract (IRSGCC), April 2022 edition with Advance Correction Slip (ACS) No. 10 or the latest. Each item in the table below corresponds to a specific clause of the IRSGCC, and references to these combined instructions shall be made under the relevant SCC clause.

IRSGCC - 2022	Clarification.
1.2(c) of Part I	Chief Engineer shall mean, CSTE/Project/SBC, office of CSTE/Project/SBC, 2nd Floor, Rail Sanraksha Bhavan, DRM office building, Bangalore – 560023 However, any changes in this regard will be advised from time to time.
1.2(e) of Part I	ENGINEER Shall mean Dy. CSTE/Project/SBC, Office of Dy. CSTE/Project/SBC, 2nd Floor, Rail Sanraksha Bhavan, DRM office building, Bangalore – 560023. However, any changes in this regard will be advised from time to time.
10.1(b)(i) of Tender form (second sheet) of Part I	This is NOT a Composite work.
Clause 10.1 of Tender form (second sheet) of Part I	(a) Technical Eligibility Criteria: 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: (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 fulfillment 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 notarized, 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 fulfill 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
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	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 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. Organization, 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 Definition of Similar Nature of Work: - Execution of Signalling works (EI/RR/PI/Auto Block Sig /IBS / IBH) either indoor or outdoor or both. Note: For E.I, after LOA is issued (but before supply of E.I equipment) MOU with RDSO approved OEM for supply of EI hardware & software, installation, testing and commissioning of EI, shall be submitted (including after sales support till warranty period).
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	NOTE: A1: For the following equipment's after award of the contract and before supply of equipment "MoU with RDSO approved firm (if available) or in case not available, MoU with OEM who meets the RDSO specification" covering supply, installation, testing and commissioning of system shall be submitted including after sales support required during the warranty period. Signal a) EI/OC b) UFSBI c) SSBPAC(D) d) UFSBI Block Interface e) Datalogger/RTU f) HASSDAC g) MSDAC h) Fire detection/suppression i) Electrical Lifting barrier j) IPS NOTE: A2. Where there is a work with a combination of more than one item of work, the predominant work shall comply with above similar nature of work. Where a required item is one among many other items in a contract, cost of required items only shall be considered to evaluate for qualifying for 35%. Tenderer shall submit clear tabulation for ease of calculation. NOTE: A5. Execution means Execution of signalling & Telecommunication work in Indian Railway or Foreign countries (having passenger traffic) or in yards of Railway users (Govt./Private). NOTE: A6. These stipulations shall be read in conjunction with guidelines from Railway Board/GM/PCE/CAO/CN and in case of any conflict those issued by Railway Board/GM shall prevail over these stipulations. The Experience Certificates are to be attached to the e-offer as per Proforma-1& 1A. Note: Proforma-1 has to be submitted for each work certificate separately. Proforma-1A has to be submitted by contractor duly including details of each certificate enclosed as Proforma-1. The certificate to satisfy similar work should be signed by an officer not lower than JAG officer in railways and Executive Engineer rank or equivalent grade in other department of Govt. of India/State govt./PSUs of Govt. of India/ State Undertaking and competent authority of Public
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	listed company. Tenderer shall attach certificate copies along with e-offer. Value of completed work done by a tenderer in earlier capacity as individual /Partnership Firm/JV/company etc. shall be reckoned only to the extent of the concerned partner's share in that Firm//Partnership firm/JV etc. The decision of Railway regarding the correctness, suitability of the work experience certificates & Relevant documents, certificates is final and the tenderer shall not have any claim whatsoever in this regard. The tender shall be eligible only if he fulfils the Technical Eligibility Criteria as definition para 10.1 and 10.4 of IRSGCC - 2022 WITH ACS-10 OR LATEST <i>[Explanation for Para 10 of the Tender Form (Second Sheet) including Para 10.1 to 10.5 - Eligibility Criteria:</i> <i>1. Substantially Completed Work means an ongoing work in which payment equal to or more than 90% of the present contract value (excluding the payment made for adjustment of Price variation (PVC), if any) has been made to the contractor in that ongoing contract and no proceedings of termination of contract on Contractor's default has been initiated. The credential certificate in this regard should have been issued not prior to 60 days of date of invitation of present tender.</i> <i>2. 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 fulfillment of credentials.</i> <i>3. 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 fulfillment of credentials</i> <i>4. In case of completed work, the value of final bill (gross amount) including the PVC amount (if paid) shall be considered as the completion cost of work. In case final bill is pending, only the total gross amount already paid including the PVC amount (if paid) shall be considered as the completion cost of work.</i> <i>In case of substantially completed work, the total gross amount already paid including the PVC amount (if paid), as mentioned in the certificate, shall be considered as the cost of substantially completed</i>
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	work. 5. <i>If a bidder has successfully completed a work as subcontractor and the work experience certificate has been issued for such work to the subcontractor by a Govt. Organization or public listed company as defined in Note for Item 10.1 Para 10 of the Tender Form (Second Sheet), the same shall be considered for the purpose of fulfillment of credentials.</i> 6. <i>In case a work is considered similar in nature for fulfillment of technical credentials, the overall cost including the PVC amount (if paid) of that completed work or substantially completed work, shall be considered and no separate evaluation for each component of that work shall be made to decide eligibility.</i> 7. <i>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 $0.3 \times 0.2 \times \text{value of the work done in the previous entity}$. 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.</i> 8. <i>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 crore; 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.</i>
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	9. <i>In case of existing partnership firm if any new partner(s) joins the firm without any modification in the name and PAN/TAN no. of 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.</i> 10. <i>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.</i> 11. <i>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.</i> 12. <i>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.</i> 13. <i>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.</i> 14. <i>In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.</i> 15. <i>In case company A is merged with company B, then company B would get the credentials of company A also.]</i>
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10.2 of Tender form (second sheet) of Part I	Financial Eligibility Criteria : Relevant documents and Certificates for fulfilling Financial Eligibility Criteria are to be attached to the e-offer as per Annexure VIB IRSGCC - 2022 WITH ACS-10 OR LATEST The tenderer must have minimum average annual contractual turnover of V/N crores 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. Note: No Technical and Financial credentials are required for tenders having advertised value up to Rs. 50 lakh. All the documents as required under financial eligibility criteria shall be submitted along with the tender. Tenderer may note that CA Certificate alone without copies of audited Balance Sheet/Income Tax Returns will not be considered for evaluation.
10.3 of Tender form (second sheet) of Part I	Bid Capacity: The tender/technical bid will be evaluated based on bid capacity detailed in Annexure – VI of IRSGCC - 2022 WITH ACS-10 OR LATEST For tenders having an advertised value more than Rs 20 Cr wherein eligibility criteria including bid capacity also, the tenderer will be qualified

	only if its availability bid capacity is equal to or more than the bid value of the present tender. Available Bid Capacity = $[AxNx2] - 0.33xNx B$ A = Maximum value of construction works executed and payment received in any one of the previous three financial years or current financial year (up to date of inviting tender), taking into account the completed as well as works in progress. N = Number of years prescribed for completion of work for which bids has been invited. B = Existing commitments and balance amount of ongoing works with tenderer as per prescribed proforma of Railway for statement of all works in progress and also the works which are awarded to tenderer but yet not started up to the date of inviting tender.
14(V) of Tender form (Second sheet) of Part I	Participation of JV is permitted. Participation of Partnership firm is Permitted.
5 of Tender form (second sheet) of Part I Bid Security	(1) (a) The tenderer shall be required to submit the Bid Security with the tender for the due performance with the stipulation to keep the offer open till such date as specified in the tender, under the conditions of tender. <u>Note:</u> (i) The Bid Security shall be rounded off to the nearest ₹100. This Bid Security shall be applicable for all modes of tendering. (ii) Any firm recognized by Department of Industrial Policy and Promotion (DIPP) as 'Startups' shall be exempted from payment of Bid Security detailed above. (iii) Labour Cooperative Societies shall submit only 50% of above Bid Security detailed above. (b) It shall be understood that the tender documents have been issued to the tenderer and the tenderer is permitted to tender in consideration of stipulation on his part, that after submitting his tender he will not resile from his offer or modify the

	terms and conditions thereof in a manner not acceptable to the Engineer. Should the tenderer fail to observe or comply with the said stipulation, the aforesaid amount shall be liable to be forfeited to the Railway. (c) If his tender is accepted, this Bid Security mentioned in sub para (a) above will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract. The Bid Security of other Tenderers shall, save as herein before provided, be returned to them, but the Railway shall not be responsible for any loss or depreciation that may happen thereto while in their possession, nor be liable to pay interest thereon. (2) The Bid Security shall be deposited either in cash through e-payment gateway or submitted as Bank Guarantee bond from a scheduled commercial bank of India or as mentioned in tender documents. The Bank Guarantee bond shall be as per Annexure-VIA and shall be valid for a period of 90days beyond the bid validity period. (3) In case, submission of Bid Security in the form of Bank Guarantee, following shall be ensured: i. A scanned copy of the Bank Guarantee shall be uploaded on e-Procurement Portal (IREPS) while applying to the tender. ii. The original Bank Guarantee should be delivered in person to the official nominated as indicated in the tender document within 5 working days before closing date for of deadline of submission of bids (i.e. excluding the last date of submission of bids). iii. Non submission of scanned copy of Bank Guarantee with the bid on e-tendering portal (IREPS) and/or non-submission of original Bank Guarantee within the specified period shall lead to summary rejection of bid. iv. The Tender Security shall remain valid for a period of 90 days beyond the validity period for the Tender. v. The details of the BG, physically submitted should match with the details available in the scanned copy and the data entered during bid submission time, failing which the bid will be rejected
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	vi. The Bank Guarantee shall be placed in an envelope, which shall be sealed. The envelope shall clearly bear the identification “Bid for the ***** Project” and shall clearly indicate the name and address of the Bidder. In addition, the Bid Due Date should be indicated on the right hand top corner of the envelope. vii. The envelope shall be addressed to the officer and address as mentioned in the tender document. viii. If the envelope is not sealed and marked as instructed above, the Railway assumes no responsibility for the misplacement or premature opening of the contents of the Bid submitted and consequent losses, if any, suffered by the Bidder.
17.2 of Tender form (second sheet) of Part I	In case of Foreign member(s), Bidders may please Note that: Entities of countries which have been identified by the nodal ministry/department as not allowing Indian companies to participate in their Government procurement for any item related to that Ministry/Department shall not be allowed to participate in Government Procurement in India for all items related to that nodal Ministry/Department, Except for the List of items Published by the Ministry/Department permitting their Participation. The term entity of a county shall have the same meaning as in the FDI policy of DPIIT as amended from time to time.
15 of Tender form (second sheet) of Part I	The tenderer whether sole proprietor / a company or a partnership firm / joint venture (JV) / registered society / registered trust / HUF / LLP 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 sign the tender, submit the tender and further to deal with the Tender/ Contract up to the stage of signing the agreement except in case where such specific person is authorized for above purposes through a provision made in the partnership deed / Memorandum of Understanding / Article of Association /Board resolution, failing which tender shall be summarily rejected. A separate 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, shall be submitted after award of work, specifically authorizing him/them to deal with all other contractual activities subsequent to signing of agreement, if required. <i>Note: A Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Apostille certificate</i>
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CHAPTER-1: Part B

- 1. An offer shall be summarily rejected without any correspondence with the bidder/firm, if the following are not submitted:**

S. No.	Detailed Reason for Summary Rejection	Reference Clause of IRSGCC 2022
1	Failure to submit the required Bid Security amount as specified in the tender conditions leads to immediate rejection of the bid without any further evaluation. This is a mandatory prerequisite for bid consideration.	Clause 5(1)(a); Annexure-I Second Sheet, Clause 6(a)
2	If the bidder fails to upload a scanned copy of the Bank Guarantee (BG) on the IREPS portal or does not submit the original BG before closing date for submission of bids (<u>i.e. excluding the last date of submission of bids</u>), the bid shall be summarily rejected.	Clause 5(3)(iii)
3	In case there is any mismatch between the details of the BG uploaded online and the original BG submitted physically, the bid shall be considered invalid and summarily rejected.	Clause 5(3)(v)
4	Non-submission of the mandatory certificate (Annexure-V) confirming that all submitted documents and statements are true and factual will result in automatic rejection of the bid <u>In addition to Annexure-V, in case of other than Company/Proprietary firm, Annexure –V(A) shall also be submitted by the each member of a Partnership Firm / Joint Venture (JV) / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc. as the case may be.</u> Non submission of above certificate by the bidder shall result in summarily rejection of his/their bid	Clause 6.1; Tender Form Second Sheet, Clause 11(iv)
5	If the tender document contains erasures, overwriting, or alterations that are not properly attested by the tenderer, the tender will be rejected outright as tampering is not permissible.	Tender Form Second Sheet, Clause 4
6	If the tender is signed by an agent or individual partner, a notarized Power of Attorney must be submitted with the bid, unless such authorization is explicitly provided in the partnership deed, Memorandum of	Tender Form Second Sheet, Clause 15

	Understanding (MoU), Articles of Association (AoA), or Board Resolution; otherwise, the bid shall be summarily rejected.	
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2. An offer shall be Invalid or Liable to Be Rejected without any correspondence with the bidder/firm, if the following are not submitted:

S. No.	Detailed Reason for Invalidity / Liability to Rejection	Reference Clause of IRSGCC 2022
1	If any document or information submitted by the bidder is later found to be forged, false, or misleading during the bid evaluation process, the bid will be declared invalid and appropriate penal action including banning may follow.	Tender Form Second Sheet, Clause 11(vi)(a)
2	If the bidder fails to properly declare their constitution (e.g., Proprietorship, Partnership, Company) or fails to attach the necessary supporting legal documents, the bid becomes invalid.	Tender Form Second Sheet, Clause 14(i), (iii), (iv), (vi)
3	If a person signs the bid documents on behalf of a firm or company without a proper Power of Attorney or Board Resolution, the bid will be considered unauthorized and thus invalid.	Tender Form Second Sheet, Clause 15
4	Bidders from countries sharing land borders with India must be registered with DPIIT. Failure to provide such registration renders the bid invalid.	Clause 7D
5	If a bidder provides misleading or incorrect information intentionally in order to gain advantage in the evaluation, the bid is liable for disqualification.	Tender Form Second Sheet, Clause 8
6	Bidders who fail to meet the specified technical qualifications, financial requirements, or bid capacity as mentioned in the tender will have their bids declared invalid.	Tender Form Second Sheet, Clause 10.1, 10.2, 10.3
7	If the successful bidder fails to provide GSTIN when liable or does not comply with GST-related declarations, their bid may be invalidated.	Clause 6(a)(iii) & (iv)
8	Engagement of recently retired railway officers in the bid without proper disclosure or permission, in violation of retirement policy rules, invalidates the bid.	Clause 16, Tender Form Second Sheet

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.

3. Performance Guarantee:

The procedure for obtaining Performance Guarantee is outlined below:

(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 upto 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 22nd day after the date of issue of LOA. Further, if the 60th 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 Bid Security and other dues payable to the contractor against that particular contract, subject to maximum of PG amount. In case a tenderer has not submitted Bid Security 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% of the original contract value:-
- (i). A deposit of Cash;
 - (ii). Irrevocable Bank Guarantee;
 - (iii). Insurance Surety Bond as per Annexure–XVII.
 - a. The provision of Insurance Surety Bond shall be for all contracts having DOC within 36 months only.
 - b. In case DOC extends beyond 36 months, fresh Insurance Surety Bond or any other form of Performance Guarantee prescribed in GCC for the balance amount shall be submitted by agency, otherwise necessary action will be taken as per terms of Agreement.
 - (iv). Government Securities including State Loan Bonds at 5% below the market value;
 - (v). Pay Orders and Demand Drafts tendered by any Scheduled Commercial Bank of India;

- (vi). Guarantee Bonds executed or Deposits Receipts tendered by any Scheduled Commercial Bank of India;
- (vii). Deposit in the Post Office Saving Bank;
- (viii). Deposit in the National Savings Certificates;
- (ix). Twelve years National Defence Certificates;
- (x). Ten years Defence Deposits;
- (xi). National Defence Bonds and
- (xii). Unit Trust Certificates at 5% below market value or at the face value whichever is less. Also, FDR in favour of FA&CAO/CN/BNC (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 upto 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 is based on original contract value and shall not change due to subsequent variation(s) in the original contract value.

(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.

(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 these conditions.

4. **Security Deposit:** The Security Deposit shall be 5% of the contract value. The Bid Security submitted by the Contractor with his tender will be retained/encashed by the Railways as part of security for the due and faithful fulfillment of the contract by the Contractor. Provided further that, if Contractor submits the Cash or Term Deposit Receipt issued from a Scheduled commercial bank of India or irrevocable Bank Guarantee Bond from a Scheduled commercial

bank of India, either towards the Full Security Depositor the Part Security Deposit equal to or more than Bid Security, the Railway shall return the Bid Security, to the Contractor.

Balance of Security Deposit may be deposited by the Contractor in cash or Term Deposit Receipt issued from Scheduled commercial bank of India or irrevocable Bank Guarantee bond issued from Scheduled commercial bank of India, 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.

The Irrevocable Bank Guarantee submitted towards Security deposit shall be initially valid up to the stipulated date of Maintenance period plus 60 days and shall be extended from time to time, depending upon extension of contract granted in terms of Clause 17A and 17B of the Standard General Conditions of Contract.

Note: Security Deposit deposited in cash by the Contractor or recovered from the running bills of a Contractor or submitted by contractor as Term Deposit Receipt(s) can be refunded/returned to the contractor, in lieu of irrevocable Bank Guarantee bond issued from scheduled commercial bank of India, to be submitted by him, for an amount equal to or more than the already available Security Deposit, provided however that, in a contract of value less than Rs. 50 Crore, such refund/ return of the already available Security Deposit is permitted up to two times and in a contract of value equal to or more than Rs. 50 Crore, such refund / return of the already available Security Deposit is permitted up to three times.

- 4.1 Refund of Security Deposit:** Security Deposit mentioned in sub clause (1) above shall be returned to the Contractor along with or after, the following:
- (a) Final Payment of the Contract as per clause 51. (1) **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.
- 4.2 Forfeiture of Security Deposit:** Whenever the contract is rescinded as a whole under clause 62 (1) of these conditions, 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 these conditions, the Security Deposit shall not be forfeited.
- 4.3** No interest shall be payable upon the Bid Security 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 IRSGCC -2022 clause will be payable with interest accrued thereon.

Please refer to para no. 16. IRSGCC - 2022 WITH ACS-10 OR LATEST for details.

5 Insurance:

Please refer to Chapter II Part B of SCC, Para 30 for Insurance to be submitted before executing the contract agreement. **Minimum amount of insurance by the Contractor for Works and Contractor's Plant and Materials including loss or damage to equipment Shall be equal to the Tender awarded Value. This insurance policy/Certificate shall be submitted before executing the contract agreement after issuance of Letter of Acceptance.**

a. Attention to Tenderers:

- (a) Post tender correspondence will not normally be entertained
- (b) The responsibility of submitting the correct documents lies with the tenderers. In case the documents are found manipulated /forged, the offer of such Tenderers will not be considered and such Tenderers are liable to be debarred to participate for future works and forfeiture of earnest money.
- (c) If requisite document in support of eligibility conditions as stated above are not submitted along with the tender the offer submitted are liable to be rejected.

b. Inspection of Site:

The Contractor before tendering shall inspect the site of work, examine the nature of soil to be excavated, nature of work to be executed, checkup the availability of working space and other constraints if any and also acquaint himself of the available access to the site of work and make **do provision in the rate for all such contingencies.**

c. Public Procurement - Preference to Make in India policy:

Provisions of Public Procurement (Preference to Make in India) Order 2017, **herein after called 'order'** as notified by Department of Industrial Policy and Promotion of Government of India under Ministry of Commerce and Industry, shall be applicable in this tender.

d. Clauses for Tenderer's of countries which shares a land border with India

- i. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
- ii. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial

juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

a) "Bidder from a country which shares a land border with India" for the purpose of this Order means:

An entity incorporated, established or registered in such a country; or

b) A subsidiary of an entity incorporated, established or registered in such a country; or

c) An entity substantially controlled through entities incorporated, established or registered in such a country; or

d) An entity whose beneficial owner is situated in such a country; or

e) An Indian (or other) agent of such an entity; or

f) A natural person who is a citizen of such a country; or

g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

iii. The beneficial owner for the purpose of (iii) above will be as under: In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means. Explanation—

(a) "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company.

(b) "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.

1. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more **juridical** person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership.

2. In case of an unincorporated **association or body of individuals**, the **beneficial** owner is the natural person(s), who, whether acting alone or together, or through one or more **juridical** person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals.

3. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner

is the relevant natural person who holds the position of senior managing official;

4. In case of a **trust**, the **identification** of beneficial **owner(s)** shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
 5. **The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority**
- iv. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

Model Certificate for Tenders

*"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the **Competent** Authority shall be attached]"*

Model Certificate for Tenders for works involving possibility of sub-contracting.

"I have read the Clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub- contracting to contractor: from such Countries; I Certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I hereby Certify that this bidder fulfils all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached]"

CHAPTER-2

SPECIAL CONDITIONS OF CONTRACT

Part A

Special Conditions of Contract- Part A

1. The Indian Railway Standard General Conditions of Contract (IRSGCC – April 2022) has been published and is applicable for this tender. Bidders are required to acquaint themselves with all provisions of IRSGCC – 2022 along with Advance Correction Slip (ACS) No. 10 or the latest. A copy can be downloaded from the 'Documents' section attached with the tender.
2. These Special Conditions of Contract (SCC) are supplementary to Part I and Part II of IRSGCC – April 2022, including all correction slips issued up to 15 days prior to the tender closing date (excluding the date of opening). In case of any discrepancy between SCC and IRSGCC, the provisions of the SCC shall prevail.
3. The SCC clauses shall be read in conjunction with the relevant IRSGCC clauses indicated against each item in the table below. These combined instructions shall be referred to as the relevant SCC clause.

Condition/ Description	Reference clause of GCC	Data
Contract Document	9.0 of Part-I	Contract document shall consist of the following a. Letter of Acceptance and acceptance letter from the Contractor b. Power of Attorney submitted by the contractor c. Special Conditions of contract (Chapter-II of Tender document attached to this e-tender) d. Technical Specification Part-A (of Chapter-III of Tender document attached to this e-tender) e. Undertaking forms that are submitted by the bidder to railway during the bidding. f. Any other document as required as per the tender conditions. The following standard documents shall also constitute the contract document. a. IRSGCC - 2022 WITH ACS-10 OR LATEST including correction slips up to the date of Opening of tender (excluding the date of opening). b. Technical Specification Part-B (of Chapter-III of Tender document attached to this e-tender).
Engineer's Representative	1.(1) (f) of Part II	Will be notified at the time of Issuance of LOA. However, any changes in this regard will be advised from time to time.

"Chief Engineer"	1.1(C) of Part II	Shall mean, CSTE/Project/SBC However, any changes in this regard will be advised from time to time.
"ENGINEER"	1.1(E) of Part II	Shall mean Dy.CSTE/Project/SBC. However, any changes in this regard will be advised from time to time.
Materials or works not covered by or properly inferable from any heading or class	2.1 Of Part-II	Materials or works not covered by or properly inferable from any heading or class of the specifications will be operated as NS items under para 39.(1) part II of IRSGCC - 2022. However, contractors are advised to go through the technical specifications and explanatory note to the schedule items in part A of Technical specification of the tender document (Chapter-3). As per which the schedule items are to be operated. Decision of ENGINEER in interpretation & inference of schedule items is final.
Address for Communication to Employer	4.0 of Part-II	Dy.CSTE/Project/SBC, 2 nd Floor, Rail Sanraksha Bhavan, DRM office building, Bangalore – 560 023. E-mail. dycstepsbc@swr.railnet.gov.in dycsteprojectbnc@gmail.com
Working Hours & Reasonable Notice	12 Of Part II	Working hours shall be from Sunrise to Sunset during execution of the works including all days of the week other than during commissioning work. Working hours shall be 24 Hours or any part of the 24 Hours as indicated by ENGINEER (or) ENGINEER REPRESENTATIVE during any other day (or) days as intimated by ENGINEER with an advance notice of 48 Hrs.
Security Deposit	16.1 of Part II	On physical completion of the work, security deposit recovered from the running bills of a contractor can be returned to him if he so desires, on submission of FDR/irrevocable Bank Guarantee for equivalent amount. <u>The validity of FDR/BG shall cover up to the period of finalization of agreements, maintenance period and performance of all contractual obligations envisaged in the contract.</u> For releasing SD, an unconditional and unequivocal no claim certificate shall be furnished by the contractor concerned.

Refund of Security Deposit	16.2 (i) Of Part II	Refund of security deposit shall be approved only by ENGINEER of Rank not less than JAG duly issuing the NO DUE Certificate.
Interest	16.3 Of Part II	No interest will be payable by Railways on the Security Deposit, or any amounts held by the Railway/payable to the Contactor under this contract <u>irrespective of extensions granted for the work completion period whatsoever.</u>
Performance Guarantee	16.4 of Part II	The amount of Performance Guarantee shall be <u>5% of Contract value.</u> The Performance Bank Guarantee shall be submitted in the Prescribed format <u>as per Performa 7.</u> Insurance Surety Bond as per Annexure-XVII Reference Para 16.4 of IRSGCC-2022 with ACS 10. No interest will be payable by Railways on the Performance Guarantee or any amounts held by the Railway/payable to the Contactor under this contract irrespective of extensions granted for the work completion period whatsoever.
Completion period	17B of Part-II	24 months from the date of issuance of Letter of Acceptance (LOA) In case of any change in commissioning due to any exigencies, Railway will inform the changes 2 months in advance of targeted commissioning and contractor shall comply with the set targets of commissioning by ENGINEER.
Bonus for Early Completion of Work	17C of Part-II	In open tenders having advertised value more than Rs.50 crore and original period of completion 12 months or more, when there is no reduction in original scope of work by more than 10%, and no extension granted on either railway or Contractor's account, Contractor shall be entitled for a bonus of 1% for each 30 days early completion of work. The period of less than 30 days shall be ignored while working out bonus. The maximum bonus shall be limited to 5% of original contract value. The completion date shall be reckoned as the date of issuance of completion certificate by Engineer.

Accepted Programme of Work:	19.(3) Part-II	The Contractor who has been awarded the work shall as soon as possible but not later than 30 days after the date of receipt of the acceptance letter in respect of contracts with initial completion period of two years or less or not later than 90 days for other contracts have to submit the detailed programme of work indicating the time schedule of various items of works in the form of Bar Chart/PERT/CPM. He shall also submit the details of organisation (in terms of labour and supervisors), plant and machinery that he intends to utilize (from time to time) for execution of the work within stipulated date of completion. The programme of work amended as necessary by discussions with the Engineer, shall be treated as the agreed programme of the work for the purpose of this contract and the Contractor shall endeavor to fulfill this programme of work. The progress of work will be watched accordingly and the liquidated damages will be with reference to the overall completion date. Nothing stated herein shall preclude the Contractor in achieving earlier completion of item or whole of the works than indicated in the programme the Contractor shall submit a detailed time programme to the Engineer within 30 days after issue of LOA. The program shall include the physical and Financial Progress vis-à-vis program and forecast cash flow adopting Project Management Software such as Primavera/Sure Track/MS Project etc. The program must identify the milestones, interface requirements and program reporting elements. The Contractor shall supply, free of cost one set of authorized software to the Engineer and the soft copy of structured program for the project. This shall be updated every month. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress. Each programme shall include: The order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage, Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing, each of these stages for work by each Subcontractor, if any, the sequence and timing of inspections and tests specified in the Contract, and a supporting report which includes:
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		a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and details showing the Contractor's reasonable estimate for the number of each class of Contractor's Personnel & Equipment, required on the Site for each major stage. Unless the Engineer, within 21 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Engineer shall be entitled to rely upon the programme when planning their activities. If, at any time, the Engineer gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Engineer within 15 days in accordance with this Sub-Clause.
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Sheds, Storehouses and Yards:	25 of Part-II	(i). Contractor shall establish proper Site Stores building/shed near site at suitable vicinity at his own/hired land/premises. Stores shall be provided with CCTV cameras, live feed, recording and backup of recording for entire period of stores/materials handling during the currency period of work. (ii). Site Stores shall have proper indoor and outdoor lighting, Fire extinguishers and round the clock security manning. (iii). Site Stores shall have proper arrangements for stacking all materials including sophisticated materials, store keeper with running ledgers/materials handling registers/gate pass, etc. (iv). Necessary fire precautions and security of the stores/materials shall be taken care throughout the currency of the work. (v). Once the Railway materials are issued from Railway store, the responsibility of security/handling materials till it's commissioning/PAC is with Contractor including during cables laying, open trenches, open/installed/uninstalled materials at site. (vi). Monthly materials statement covering all transactions between Railways, usage and ground balance shall be maintained and to be submitted to Railway Supervisor In-charge.
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Provision of Efficient and Competent Staff at Work Sites by the Contractor:	26 of Part-II	(i). The Contractor shall place and keep on the works at all times efficient and competent staff to give the necessary directions to his workmen and to see that they execute their work in sound & proper manner and shall employ only such supervisors, workmen & labourers in or about the execution of any of these works as are careful and skilled in the various trades. (ii). The Contractor shall at once remove from the works any agents, permitted sub-contractor, supervisor, workman or labourer who shall be objected to by the Engineer and if and whenever required by the Engineer, he shall submit a correct return showing the names of all staff and workmen employed by him. (iii). In the event of the Engineer being of the opinion that the Contractor is not employing on the works a sufficient number of staff and workmen as is necessary for proper completion of the works within the time prescribed, the Contractor shall forthwith on receiving intimation to this effect deploy the additional number of staff and labour as specified by the Engineer within seven days of being so required and failure on the part of the Contractor to comply with such instructions will entitle the Railway to rescind the contract under Clause 62 of these conditions
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Employment of Qualified Engineer	26A.1 of Part-II	Graduate engineer only from Electronics and Communication (EC) or Electrical Engineering (EE) or Computer Science Engineering (CS) or Instrumentation (EI) shall be considered with an experience of minimum 2 years in Execution of Telecommunication and networking. Diploma engineer only from Electronics and Communication (EC) or Electrical Engineering (EE) or Computer Science Engineering (CS) or Instrumentation (EI) shall be considered with an experience of 3 years in Execution of Telecommunication and networking. However, the relaxation in the experience will be given by ENGINEER based on the knowledge and experience of the proposed personnel on case-by-case basis in case of non-availability of experienced Qualified engineers. a. The list of technical personnel along with the copy of their bio-data and Degree/ Diploma certificate proposed to be engaged by the contractor shall be submitted to the ENGINEER within 15 days from the date of issue of LOA and the approval of Engineer is to be obtained for engaging them for this specified work. The period of deployment of technical staff covers from 15 days after the date of issue of letter of acceptance till completed works are handed over to the Railway. b. The contractor shall provide the technical personnel continuously on the project and the initially approved personnel should not be changed in the mid-course of the contract, except in exceptional situations and only with the approval of the Dy. CSTE in-charge of the project. Continuous engagement of technical personnel is defined as under: i. Record of engagement of technical personnel shall be maintained by the contractor at each site where his Engineers are deployed. This record will be verified by the Dy. CSTE in-charge of the project or any other Railway representative. In case of non-availability on any single occasion at site, it will be treated as absence for a week. ii. Technical staff should be available at site whenever
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		required by the Engineer-in-charge or his authorized representative to take instructions. In case, the contractor fails to employ the technical staff as aforesaid, he shall be liable to pay Rs. 60,000/- (Rupees Forty thousand only) for each month of default or part thereof in case of each Graduate Engineer and Rs. 45,000/- (Rupees Twenty-Five thousand only) for each month of default or part thereof in case of each qualified diploma holder. iii. The contractor shall submit the copy of bio-data and Degree / Diploma certificate of the above technical staff employed by him for the scrutiny by Railway and for the record along with the certificate of Competency enclosed in Proforma-12. iv. Railway reserve the right to scrutinize the records of the contractor to ascertain as to whether the qualified staff has been actually employed by him and is paid for. c. While passing each "on" account bill, the ASTE/XSTE in-charge will certify the availability of technical staff as above; otherwise, the recovery as above shall be made from every bill. d. The decision of the Engineer-in-charge, whether the required technical staff was not employed by the contractor shall be final and binding upon the contractor
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Failure to employ/deploy the Engineer	26A.2 of Part-II	In case the Contractor fails to deploy the Engineer, as aforesaid in SCC Para 26A.1, he shall be liable to pay liquidated damages at the rates as follows. During Execution Period: 10000/- per week or part of week in case of Graduate engineer. 7000/- per week or part of week in case of Diploma engineer. 5000/- per week or part of week in case of Wireman/Assistant Wireman
No of Qualified Engineers	26A.3 of Part-II	Two Graduate engineer or Two Diploma engineer with three years construction experience shall be deployed. In addition to the Graduate/Diploma engineers, contractor shall deploy sufficient wiremen as per mutually agreed program duly complying the completion periods mentioned in the Para 17B of SCC Chapter-2.
Facilities for inspection	28 Of Part-II	The contractor shall also arrange the Road Vehicle to the engineer or engineer's representative during Recording of Measurements and Test checks required for the purpose of Measurement with minimum one day period or more days as per site requirement, subjected to maximum of 3 days per occasion. An advance intimation/notice will be given at least 24 Hours prior to the requirement of such engagement of vehicles. Necessary Diesel/Petrol, toll, parking etc. & repairs if any shall be borne by the contractor. Multi-Utility Road Vehicle: The contractor at his own cost shall provide one multi-utility vehicle in good condition with Driver, fuel, toll charges, etc for the use of Railway personnel for commuting for site works/stores/inspections, etc during the currency of the work including extended completion period. No separate payment will be done for such arrangements whatsoever.
Contractor to Supply Water for Works	31.(1) of Part- II	The Contractor shall make his own arrangements within his quoted rates for necessary water required for the performance of the contract
Supply of Electric	31.4(a) of	The Contractor shall make his own arrangements at his cost, for the supply of electricity for the works. He shall

Power for Works	Part-II	arrange for source, transformer protection and approval from the concerned authorities at his cost. The Contractor shall be responsible for arrangements to obtain supply of Electric Power for the works. No separate payment will be done by Railways for this purpose, whatsoever.
Electric Supply from the Railway System	31.4(b) of Part-II	Railways do not guarantee supply of electricity to any of the Contractor's works/requirement. No provision of electric supply will be made available by Railway except provision of lighting arrangements for the new & existing building. The power supply requirement for lights inside relay room/panel room/IPS/Battery rooms will be provided by railway as and when available for the location. <i>This doesn't absolve contractors' responsibility to take up the works when such lighting facility is not extended to relay /panel/IPS/Battery rooms etc. by railway. In case the work has to be carried out in newly constructed buildings without Electric Connection, Contractor shall make his own lighting arrangements through portable generators without affecting the progress of the work</i> <u>Using of Drilling machines, Initial charging of Batteries, Track drilling machine without prior approval in writing by ENGINEER is prohibited. failing which penal action will be taken. Penal action will be taken in case of Unauthorized tapping of power from Railways sources.</u> <u>Decision of ENGINEER on the tariff/charges for power supply arranged by Railway and Penalty wherever applicable is final.</u>
Hire of Railway's Plant	33.2 Of Part-II	No hiring of Plants or Portable Engines will be done by Railways. All the Plants and Portable engines required for execution of work shall be arranged by contractor to his own cost and no separate payment will be done by Railways for such engagement.
Precaution During Progress of Works	34.(1) of Part-II	Shall be at contractors' own cost and no separate payment in whatsoever form will be paid by railway.

Variation in quantities	42(2) of Part- II	There shall not be any claim of contractor if savings of any schedule item/ items is/are more than 25% to 100% The contractor shall have no claim on savings in any item/items of the schedule and issue a “No Claim Certificate” when it is certified by engineer/engineer’s representative that the work proposed to be reduced & schedule items proposed for not operation, Partly or fully, will not be required in the same work. <u>Variation in any schedule item that is accepted as a special case on higher side shall be done only after negotiation and approval of Tender Accepting Authority and the percentage rates for varied quantities as specified in 42(2)(iii) shall be applicable on the negotiated rate only.</u>
Price Variation Clause (PVC)	46A of Part- II	Price Variation Clause (PVC) shall be applicable only in tender having advertised value above Rs. 2 Crores and having completion period above 12 months.
Manner of Payment	46.(4) Of Part II	Through NEFT to the bank account of the contractor/Firm which shall be indicated by the contractor during agreement/after issuance of LOA. OR <u>LC (Letter of Credit)</u> as mode of payment may be adopted as follows:
		a. For all the tenders having advertised value of Rs 10 lakh or above, the contractor shall have the option to take payment from Railways through a letter of credit (LC) arrangement. b. This option of taking payment through LC 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. c. The option so exercised, shall be an integral part of the bidder's offer. d. 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. e. In case tenderer opts for payment through LC, following shall be the procedure to deal release of payment through LC: f. The LC shall be a sight LC. g. The contractor shall select his Advising/Negotiating bank for LC. The incidental cost towards issue of LC and its operation thereof shall be borne by the contractor. h. 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 2020-20. SBI branches where the respective Railway Accounts Office has its Account (local SBI 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. i. 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 finalized by the engineer in consultation with the contractor on the basis of expected progress of work. j. 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. k. The LC terms and conditions shall inter-alia provide that Railways will issue a Document of Authorization after passing the bill for completed work, to enable contractor to claim the authorized amount from their bank. l. The acceptable, agreed upon document for payments to be released under the LC shall be the Document of
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		Authorization. m. The Document of Authorization shall be issued by Railway Accounts Office against each bill passed by Railways. n. On issuance of Document of Authorization, a copy of Document of Authorization shall be posted on IREPS for download by the contractor. A digitally signed copy of Document of Authorization shall also be sent by Railway Accounts Office to Railway's bank (Local SBI Branch). o. 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. p. The payment against LC shall be subject to verification from Railway's Bank (Local SBI Branch). q. The contractor's bank (advising bank) shall r. submit the documents to the Railway's Bank (Local SBI Branch). s. 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. t. Any number of bills can be dealt within one LC, provided the sum total of payments to contractor is within the amount for which LC has been opened. u. The LC shall be closed after the release of final payment including PVC amount, if any, to the contractor. v. The release of performance guarantee or security deposit shall be dealt directly by railway with the contractor i.e., not through LC.
Maintenance of works Period of Maintenance	47 of Part II	Period of maintenance <u>shall be 36 months</u> from the issuance of Provisional Acceptance Certificate for the specified part of work.
		Service engineers for maintenance shall normally be out of those engineers associated with the execution of the work. Changes, if any on special case shall be with the specific approval of railways. Details of the Service

		Personnel/Engineers (Bio-data and experience) proposed to be associated with maintenance, shall be furnished by the Contractor to the Railways, well in advance of the commencement of the maintenance period. No separate payment will be done for deployment of personnel, Repairs/Replacement of equipment(s), for any other forms of maintenance as indicated in the contract, during the Maintenance period. During the period of maintenance, the contractor shall maintain and uphold in good substantial, sound and perfect condition all and every part of the works & Equipment supplied and/or executed as part of the contract including repair, replacement of any equipment failed at free of cost and shall make good from time to time and at all times without affecting safe and Punctual running of trains. Any failure or delay in providing the Personnel, repair, Maintenance of the work as indicated above and, in the contract, Contractor is liable for penalty as decided by ENGINEER.
Certificate of Completion of Work & Part works.	48.1 & 48.2 of Part II	When any such certificate is given in respect of part of a work, it shall be <u>referred as Provisional Acceptance Certificate</u> for the specific part of the work. Whenever Provisional Acceptance Certificate is issued, such part shall be considered as completed and the period of maintenance of such part shall commence from the date of completion mentioned in the Provisional Acceptance certificate issued for that part of the work. <u>Provisional Acceptance Test:</u> As soon as the contractor informs the railway, ENGINEER determines that the works are completed from end to end, railway shall carry out all tests as per the acceptance test schedule. Any component, modules, sub-assemblies or equipment failing during the commissioning test shall be replaced/repared free of cost by the tenderer. When all the tests are successfully completed end to end, the provisional test report will be jointly prepared. <u>Provisional Acceptance Certificate shall be issued only,</u>

		after completion of provisional acceptance test and if no problems are noticed during observation period, Engineer shall issue a Provisional Acceptance Certificate for successfully commission of whole sub-system covering all materials and services included in the Schedule of works, after the acceptance test and as per the approved test procedure have been completed and the performance has been found to meet the specifications. Railway's decision in this respect shall be final. The date of issue of the Provisional Acceptance Certificate will be treated as the date of Completion of that part of the work. Before issuance of Such Provisional Acceptance Certificate, it shall be ensured that the work/Part of the work is completed at site in all respects, Stations/ LC gates are commissioned or any other sub system that can be commissioned for final use of railways wherever applicable as a whole or part of the scope of work , relevant As-made Drawings are Submitted (not necessarily approved) and items recorded in the Note of Joint Inspection with Open line after commissioning of first phase of station/ LC gates are complied. Decision of Engineer on the compliance of remarks in Joint note is final. <u>The competent authority to issue Work Completion Certificate and/or Provisional Acceptance Certificate shall be "Engineer" of rank not less than JAG.</u> <u>When the Provisional acceptance certificate for the last part of the work is issued, then the Work is deemed to be completed and work completion certificate can be issued by competent authority.</u>
Maintenance Certificate	50.(1) of Part II	<u>Maintenance certificate is applicable.</u> The Maintenance certificate, inter alia, should mention that the work has been completed in all respects, satisfactory completion of maintenance period and that all the contractual obligations have been fulfilled by the contractors and there is no due from the contractor to Railway against the contract concerned.

Wages to Labor	54 Of Part II	Transparency in payment of Contract Labour Wages and other payments: In order to increase transparency in payment of Contract Labour wages and other payments, a web-based e-application has been developed and hosted on website www.shramikkalyan.indianrailways.gov.in. All contractors are required to upload details of their LOAs, engaged workmen, wage payment details, PF/ESI details, bonus details etc., on monthly basis. The details so uploaded shall be available in public domain
Labour Camps:	59.(1) of Part-II	Suitable sites on Railway land, if available, may be allotted to the Contractor for the erection of labour camps or temporary stores, either free of charge or on such terms and conditions that may be prescribed by the Railway. All camp sites shall be maintained in clean and sanitary conditions by the Contractor at his own cost.

SPECIAL CONDITIONS OF CONTRACT

Part B

1.0 Safety and Security

- 1.1** The works included in this contract are to be carried out close to the running tracks and public utilities, therefore, safety of running trains and the public is paramount. Therefore, all activities undertaken by the Contractor / his Sub-contractors shall always ensure safety. The contractor shall comply with the instructions issued by the Railway / Engineer / Employer from time to time to ensure safe running of trains while carrying out works. The rates quoted by the Contractor shall be deemed to include all expenditure incurred in compliance with the same.
- 1.2** Before starting any excavation work adjacent to existing track, the contractor shall ensure that necessary permissions have been obtained and required precautions have been taken for doing such work in terms Joint Procedure Order reproduced below:

2.0 “JOINT PROCEDURE ORDER FOR UNDERTAKING DIGGING WORK IN THE VICINITY OF UNDERGROUND SIGNALING, ELECTRICAL AND TELECOMMUNICATION CABLES”

(Annexure to letter No. 2021/Tele/5(2)/3-Part (1) (3425647) dated 12.06.2023)

- 2.1** Cable route marking for all types of cable must be made available block section wise on Railnet.
- 2.2** Before allowing the contractor to work near the tracks, the work executing agency (like Sr.DSTE/Sr.DEN/Sr.DEE or Dy.CSTE/Dy.CEE/Dy.CE 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.
- 2.3** 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.
- 2.4** 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.
- 2.5** 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.
- 2.6** 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.

2.7 Penalty to be imposed for damages to cable shall be as under:

S. N	Cable damaged	Penalty per location
1	Only Quad cable or Signalling cable	₹ 1.0 Lakh
2	Only OFC	₹ 1.25 Lakh
3	Both OFC & Quad	₹ 1.5 Lakh

2.8 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 Sr.DSTE/Sr.DEE 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 Sr.DSTE/Sr.DEE 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.

2.9 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.

2.10 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.

2.11 Working near running line

2.11.1 The contractor shall not allow any road vehicle belonging to him or his suppliers etc. to ply in railway land next to the running line. If for execution of certain works viz earth work for parallel railway line and supply of ballast for new or existing rail line, gauge conversion etc, road vehicles are necessary to be used in railway land next to the railway line, the contractor shall apply to the Engineer for permission giving the type & no. of individual vehicles, names & license particulars of the drivers, location, duration & timings for such work / movement. The Railways/Employer/ Engineer or hi authorized representative will personally counsel, examine & certify, the road vehicle drivers, contractor's flag men & supervisor and will give written permission

giving names of road vehicle drivers, contractor's flag men and supervisor to be deployed on the work, location, period and timing of the work. This permission will be subject to the following obligatory conditions:

- 2.11.2 Road vehicles can ply along the track after suitable cordoning of track with minimum distance of 6 meters from the center of the nearest track. For working of machinery close to the running tracks or plying of road vehicles during night hours, the contractor shall apply to the Engineer in writing for permission, duly indicating the site details in a neat sketch and safety measures proposed to be taken. Subject to the approval of concerned Railway authorities, the Engineer or his authorized representative will communicate permission to the contractor / contractor's representative. The contractor and his men shall strictly adhere to the instructions given along with such permissions.
- 2.11.3 Nominated vehicles and drivers shall be utilized for work in the presence of at least one flag man and one supervisor certified for such work. In order to monitor the activities during night hours, additional staff may have to be posted based on the need of the individual site.
- 2.11.4 The Contractor's machinery, equipment and vehicles shall normally operate 6 m clear of track. Any movement / work at less than 6m and upto a minimum of 3.5m clear of track centre, shall be carried out only in the presence of a person (including any railway employee) authorized by the Engineer. No part of the road vehicle shall be allowed at less than 3.5m from track centre. Cost of such railway employee shall be borne by the Employer.
- 2.11.5 The Contractor's machinery and equipment like Cranes, Flash Butt Welders, Ballasting machinery, Compactors, Track Laying Systems etc., are required to operate close to the existing line carrying traffic. Contractor is fully responsible for operating these machinery without endangering the safety of the running line and traffic.
- 2.11.6 The contractor must ensure the safety of labourers engaged by him while crossing the track during the course of execution of work and the Railway will not be responsible for any injury sustained by the labourer or for any fatal accident. The contractor should bear all the loss and expenditure involved. Wherever necessary he should also provide necessary look out men.
- 2.11.7 The work should be carried out without any interference to the normal working of the Railway track and structures. The contractor will be held responsible for any loss or damage or injury caused during the course of work to the labourer or to the public/private person or to the Railway/ Public/private property and the contractor should bear all the loss and expenditure involved.
- 2.11.8 Wherever work is to be executed close to any running railway lines or roads or buildings or public passage, the Contractor shall ensure proper protection of public,

railway/public property. He shall also ensure all special precautions as provided in this tender.

- 2.11.9 The contractor shall be responsible for anti-larval work at his cost during progress of works as may be prescribed by the Engineer on the advice of the Railway or any Government Medical authority and where use of insecticides are involved, it shall be done in accordance with the provisions of the act and rules in this behalf at the cost of contractor, who shall also be solely responsible for any acts or omissions under the provision of the aforesaid rules.
- 2.11.10 The Contractor shall ensure that necessary sanitary facilities are provided by the Contractor for their labour, and where they fail to do so notice shall be given to the Contractor that the same will be provided by the Railway at their cost and recovery shall be made from their bills. Where contractor avails existing sanitary arrangements of the Railways charges as decided by Railway from time to time is recoverable from the contractor.
- 2.11.11 The contractor shall arrange to obtain permission direct from the State Government or local authorities concerned for using Forest, PWD or Panchayat roads. The rates tendered shall be inclusive of any cess, tax or any other charges payable to the authorities concerned.
- 2.11.12 The contractor shall make his own arrangements for obtaining the license for any explosives, as may be necessary, for procurement, transportation, storage and use of the same. All possible assistance will be given by the Railway, should there be any difficulties in obtaining the license etc. However, any failure shall not form the basis for any claim by the contractor against the Railway or for additional payment for the work.
- 2.11.13 In case of use of explosives for blasting the contractor shall strictly abide by the Indian Explosive Act, the Rules and Regulations framed there under in carrying out the work, shall observe all the provisions of the Indian Mine Act and the metalliferous mines regulations and rules there under as well as any other Act and Rules, as may be enacted and laid down by the State and Central Government from time to time, for such work. The contractor will be held responsible for any loss/damage/injury caused during explosion to the labourers or to the public/ private persons or to Railway/Public/Private property and the contractor should bear all the loss/expenditure thereby involved.
- 2.11.14 The contractor shall be fully responsible for ensuring safety at all times and shall bear the cost of all damages in cases of accidents/unusual occurrences resulting in damages to Railway property and passengers. Any breach of the safety conditions for precautions and measures as specified hereunder and/or elsewhere in the tender document by the contractor and/or his agents/representatives affecting the safety of movement of trains, engines, or other rolling stock of the Railway, shall constitute a

breach of contract by the contractor leading to termination of contract for default on the part of the contractor including recovery of damages.

- 2.11.15 The works required to be done under traffic block shall be carried out only in the presence of Railway officials. The Railway supervisor shall certify safe conditions for passage of trains before resumption of traffic. The works to be done under traffic Block shall be carried out under the provision of banner flag and protection of engineering flagman. Safe practices at all times and non-infringement to moving trains shall be ensured. Road vehicles, material trolleys, dollies etc., which may have tendency to roll off towards the running lines shall be checked by providing chains, locking arrangements, blocks etc. Site in-charge of the contractor shall be primarily responsible. All equipment like cranes, lifting jack etc., shall be tested, duly calibrated and certified prior to use at construction site. They shall also have specific indications conforming that the operators handling them are trained in the safety precautions near track.
- 2.11.16 Construction workers at site shall be provided with personal safety gear like reflective vest, helmet, leather shoes, gloves, eye-wear etc., as approved as per construction industry standards. For persons working at pier top/girder level, temporary supports, hand railing etc., protection with help of ropes, slings and temporary railings shall be provided. All locations, where construction activity is in progress adjacent to existing railway lines, should be cordoned off with proper barricades. Barricades consisting of bamboo/signalling poles and supported horizontally by similar bamboo/signalling poles should be provided. These barricades should be provided at a distance of approximately 3.5 m from the centre line of track or as directed by the Engineer-in-charge. All the barricades are to be painted or struck on with red luminous paint/strips at suitable intervals on the barricades. Barricade should be available at every stage of work as directed by the Engineer-in-charge and shall be maintained in perfect condition all the time.
- 2.11.17 Road vehicles employed by the contractor should have the certificate for its road worthiness and each vehicle numbered and the license particulars maintained. Contractors should ensure that the drivers permitted by them to work on such road vehicles are identified, counselled, certified and are provided with photo Identity cards. Wherever the work requires the movement of road vehicle within a distance of 3.5 to 6m from the centre line of the nearest track, such work shall be done only in the presence of Railway's representative. The driver of the vehicle shall always face the track when reversing the vehicle and whenever he cannot face the track, for whatever reason, he shall be invariably assisted by a helper with a whistle who should guide him and ensure safety.
- 2.11.18 The contractor shall execute a Bond undertaking to ply the road vehicles in a safe and satisfactory manner and strictly in accordance with the stipulations and

other conditions specified by the Engineer and to engage and retain only the permit holder to be the contractor's agent in charge of the vehicle while driving or at rest. The person in charge of the vehicles and the attendants shall, at all times, be vigilant and on the lookout for signals from the lookout men, flagmen or other personnel available at site with a view to stop or regulate the road movement so as to ensure adequate margin of safety for the timely passage of an approaching train or a Railway engine, without any delay or detention. The contractor shall also be bound by the provisions of this agreement to ply the road vehicles only with adequate margin of safety, well clear of the fixed structure profile of infringements, as stipulated in the rules made under the Indian Railways Act and to seek and be guided by the signals and other directions of any lookout men or other personnel retained for the purpose of ensuring safety and to ensure extra care and vigilance while turning, reversing or moving the road vehicles in any other manner at an inclination to the running railway track or the siding as the case may be. The contractor shall employ necessary look out men also at his own cost, irrespective of any other arrangement that railway may make in this regard.

- 2.11.19 All work sites shall be supervised by the contractor's representative and also a representative of the Railway Organization. Whenever work of plying road vehicle within 6 m zone is actually in progress, Lookout men should invariably be available. Lookout men will have to be provided by the contractor, from out of the list of persons who are authorized to carry out these duties. Authorization will be issued to the individuals, by the representative of the Engineer-in-charge. Railway's supervisor will monitor the availability and alertness of the lookout men. In case of non-availability of lookout men, this Railway's supervisor shall stop further activities of plying of road vehicles. Even if no work is executed in the night, look-out men shall patrol the beat as identified by the representative of the construction organization to ensure the safety of the running trains, especially from any infringement.
- 2.11.20 Working alongside the track during night hours is normally prohibited. Such work can be done in the night only with the written permission of the Engineer-in-charge. Where night working is permitted, lighting of the work site as required should be done.
- 2.11.21 For carrying out any critical activities near to existing running lines, the contractor's engineer shall furnish the construction programme in advance to railway Supervisor/Engineer. No such work should be taken up in absence of the supervising railway engineer.
- 2.11.22 The contractor shall provide at site at his own cost, all protection measures including exhibition and lighting of all Temporary Engineering Signals as per Railway rules, instructions and norms. All lights provided by the contractor shall be screened so as not to interfere with any signal light on the Railways or with any traffic or signal

lights of any local or other authority.

2.11.23 The contractor remains fully responsible for ensuring safety. In case of any accident, the Contractor shall bear cost of all damages to his equipment and men and also damages to Railway and its passengers.

2.11.24 Indemnity by Contractor, All precautions to ensure safety of workmen must be taken while working /Loading-Unloading the material during execution of work. Traffic rules shall be strictly followed and the Contractor shall indemnify and save harmless the Railway / Employer / Engineer from and against all actions, suit proceedings, losses, costs, damages, claims, and demands of every nature and description brought or recovered against the Railways / Employer / Engineer by reason of any act or omission of the contractor, his agents or employees, in the execution of the works or in his guarding the same. All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the actual loss or damage sustained, and whether or not any damage shall have been sustained.

2.12 Damage to Railway Property or Life or Private Property

2.12.1 The contractor shall be responsible for all risks to the works and for the trespass and shall make good at his own expense all loss or damage whether to the works themselves or to any other property of the Railway or the lives of persons or property of others from whatsoever cause in connection with the works until they are taken over by the Employer and this although all reasonable and proper precautions may have been taken by the Contractor, and in case the Railway/Employer/Engineer shall be called upon to make good any costs, loss or damages, or to pay any compensation, including that payable under the provisions of Workmen's compensation act or any statutory amendments thereof to any person or persons sustaining damages as aforesaid, by reason of any act, or any negligence or any omissions on the part of the contractor, the amount of any costs or charges including costs and charges in connection with legal proceedings, which the Railway/Employer/Engineer may incur in reference thereto, shall be charged to the contractor. The Railway / Employer / Engineer shall have the power and right to pay or to defend or compromise any claim of threatened legal proceedings or in anticipation of legal proceedings being instituted consequent on the action or default of the contractor, to take such steps as may be considered necessary or desirable to ward off or mitigate the effect of such proceedings, charging to Contractor, as aforesaid, any sum or sums of money which may be paid and any expenses whether for reinstatement or otherwise which may be incurred and the propriety of any such payment, defense or compromise, and the incurring of any such expense shall not be called in question by the Contractor.

2.13 Safety of Public

2.13.1 The Contractor shall be responsible to take all precautions to ensure the safety of the

Public whether on Public or Railway property and shall post such look out men as may in the opinion of the Engineer be required to comply with regulations pertaining to the work.

2.13.2 The Contractor shall provide effective barricading using G.I. corrugated sheets around foundation pits, trenches, erection sites, demolition sites etc., to prevent accidents and injuries to the public. He shall erect barricading duly leaving safe passage for the movement of the public as per the directions of Engineer.

2.13.3 No payment will be made for providing such barricading and the rates quoted by the Contractor shall be inclusive of such safety measures.

2.14 Reporting of Accidents

2.15 The Contractor shall report to the Engineer details of any accidents as well as failure of any signaling gears as soon as possible after its occurrence. In the case of any fatality or serious accident, the Contractor shall, in addition, notify the Engineer and the Employer immediately by the quickest available means.

2.16 **Life-saving Appliances and First-aid Equipment:** The Contractor shall provide and maintain upon the Works sufficient, proper and efficient life-saving appliances and first-aid equipment to the approval of the Engineer and in accordance with the requirements of ILO Convention No. 62. The appliances and equipment shall be available for use at all time

2.17 Security Measures

2.17.1 Security arrangements for the work shall be in accordance with general requirements and the contractor shall conform to such requirements and shall be held responsible for the action or inaction on the part of his staff, employees and the staff and employees of his subcontractors.

2.17.2 Contractor's as well as Sub Contractor's employees and representatives shall wear identification Badges (cards), uniforms, helmets, gum boots and other safety / protection gadgets / accessories provided by the Contractor. Badge shall identify the Contractor and show the employee's name and number and shall be worn at all times while at site.

2.17.3 All vehicles used by the contractor shall be clearly marked with the Contractor's name or identification mark.

2.17.4 The contractor shall be responsible for security of works for the duration of the contract and shall provide and maintain continuously adequate security personnel to fulfill these obligations. The requirements of security measures shall include, but not be limited to, maintenance of Law and Order at site, provision of all lighting, guard, flagmen, and all other measures necessary for protection of works within the colonies, camps and elsewhere at site, all materials delivered to the site and all

persons employed in connection with the works continuously throughout working and non-working periods including nights, Sundays and holidays, for the duration of the contract. However, at work sites in close proximity of traffic corridors where public and traffic are likely to come close to the work area, suitable barricading as proposed by contractor and approved by Engineer shall be provided.

- 2.17.5 No separate payment will be made for providing security measures and will be deemed to be included in the rates quoted by the contractor.

3.0 INSPECTION OF MATERIAL:

- 3.1 All equipment, materials, fittings, and components shall be procured from RDSO-approved or recommended sources as per applicable IRS/RDSO/TEC specifications. These items shall be inspected by RDSO. If no specification or approved source exists, or if RDSO does not inspect such items as per policy, inspection shall be carried out by RITES or an authorized Railway representative, as decided by CSTE/Projects/SBC.
- 3.2 Safety items such as wire coils, terminals, fuses, power equipment, and signalling cables shall invariably be inspected by RDSO. Critical items shall also be inspected as per Railway Board letters dated 04.03.1991 and 18.06.1991. Signalling items with an order value above ₹5 lakhs must be inspected by RDSO as per Board letter dated 06.09.2017. Items below ₹5 lakhs may be inspected by RITES or Consignee, provided they are sourced from RDSO-approved firms. However, items specified for mandatory RDSO inspection must be inspected by RDSO regardless of value.
- 3.3 When Consignee inspection is applicable, it shall be carried out by the Engineer-in-Charge or Railway representative nominated by Dy.CSTE/Projects/SBC. All arrangements and expenses for such inspections shall be borne by the contractor. If RDSO or RITES is unable to inspect any listed item, the Engineer's representative may inspect it on written request, subject to submission of Manufacturer's Guarantee and compliance undertaking. Any false declaration will require free replacement of the item by the contractor.
- 3.4 The contractor shall provide at least two weeks' notice to RDSO/RITES/Railway for inspection readiness and ensure necessary facilities at the inspection site. Railways may also re-inspect at site or depot and witness manufacturing/testing. Delays in inspection by Railway shall be considered a valid ground for time extension. Materials must be well packed and may be rejected on receipt if found damaged or defective, even if earlier cleared.
- 3.5 All materials and workmanship shall be of high quality and as per specification. RDSO/RITES inspection charges will be borne by Railways, while the contractor shall bear costs for testing or analysis during execution and warranty. Samples may be drawn by Railways for independent testing, free of cost.

- 3.6 Materials not covered under RDSO/IRS/TEC specs shall be procured from reputed manufacturers or their authorized dealers with prior approval of the Engineer, along with submission of relevant test certificates.

4.0 INSPECTION OF WORKS

The Engineer or his representative may inspect and test the various portions of the work at all stages and shall have full power to reject all or any portion of the work that he may consider to be defective or inferior in quality of materials, workmanship or design in comparison to what is called for in the specification. In the event of rejection of any work already executed and not in accordance with specification as in this tender and/or as determined by the Engineer or which the Contractor has been apprised, the Contractor shall carry out alterations/replacements to such works to the satisfaction of the Engineer in- charge of the work for which no additional payment will be borne by the Railways.

5.0 INSPECTING OFFICER – POWER OF REJECTION

Inspecting officer as nominated by ENGINEER, shall have the following Right :

- 5.1 To reject any items submitted as not being in accordance with the tendered technical specification.
- 5.2 To reject the whole of the installment offered for inspection, if after inspection the inspection authority is satisfied that the material offered for inspection is unsatisfactory.
- 5.3 To mark the rejected stores with a rejection mark, so that they can be easily identified if resubmitted.
- 5.4 The inspecting officer's decision as regards the rejection shall be final and binding on the contractor.

6.0 CONSIGNEE'S RIGHT OF REJECTION:

- 6.1 Notwithstanding any approval which the inspecting officer may have given in respect of the stores or any materials or the work or workmanship involved in the performance of the contract (Whether with or without any test carried out by the contractor or the Inspecting officer or under the direction of the Inspecting officer) and notwithstanding delivery of the stores where so provided to the interim consignee, it shall be lawful for the consignee, on behalf of the purchaser, to reject the stores or any part, portion of consignment thereof within a reasonable time after actual delivery thereof to him at the place or destination specified in the contract. If such stores or part, portion of consignment thereof is not in all respects in conformity with the terms and conditions of the contract whether on account of any loss, deterioration or damage before dispatch or delivery or during transit or otherwise whatsoever.

- 6.2 When any stores delivered at the consignee's depots are rejected, this shall be removed by the contractor within 15 days from the date of rejection. Such rejected stores shall lie at the contractor's risk from the date of rejection. If the stores are not removed by the contractor within this period, the purchaser or his nominee shall have the right to dispose of such stores, as deemed fit, at the contractor's risk and account.
- 6.3 The purchaser shall also be entitled to recover from the contractor, handling and ground rent/demurrage and any other charges for the period the rejected stores are not removed after the aforementioned period.
- 6.4 Stores that have been dispatched by rail and rejected after arrival at destination may be taken back by the contractor either at the station where they were rejected or at the station where they were dispatched. If the contract is placed for delivery F.O.R. station of dispatch, the contractor shall pay the carriage charges on the rejected consignment at Public Tariff Rates from the station of dispatch to station where they were rejected. If the contractor prefers to take back the goods at the station from which they were dispatched, the goods shall, in addition, be booked back to him, freight to pay at Public Tariff Rates and at owner's risk.

7.0 CONSEQUENCES OF REJECTION:

- 7.1 If the stores being rejected by the Inspecting Officer or consignee at the destination, the contractor fails to make satisfactory supplies within the stipulated period of delivery, the purchaser shall be at liberty to:
- 7.2 Request the contractor to replace the rejected store forthwith but in any event not later than period of 21 days from the date of rejection and the contractor shall bear all the cost of such replacement, including freight, if any, on such replacing and replaced stores but without being entitled to any extra payment on his or any other account.
- 7.3 Purchase or authorize the purchase of quantity of the stores rejected or others of a similar description (when stores exactly complying with the particulars are not readily available, in the opinion of the purchaser, which shall be final), without notice to the contractor, at his risk and cost and without affecting the contractor's liability as regards to the supply of any further instillment due under the contract, OR Cancel the contract and purchase or authorize the purchase of the stores or others of a similar description (when stores exactly complying with the particulars are not readily available, in the opinion of the purchaser, which shall be final) at the risk and cost of the contractor.

8.0 PROGRAMME OF WORK & MILESTONES FOR COMPLETION OF WORK:

- 8.1 A tentative programme chart and/ or the list of milestones prepared by the Railways for the contract to achieve the Railway's Milestones/needs will be attached along with Acceptance Letter. The Concerned Engineer-in-charge of the work will fix appropriate milestones and monitor the progress from time to time
- 8.2 Immediately on issue of letter of acceptance of the tender the contractor should submit a programme of work in a suitable proforma showing the activities work wise for completing the whole work within the stipulated period of completion, in consultation with the Engineer-in-charge of the work and if so desired by the Engineer, the contractor shall submit further programme from time to time, taking into consideration the latest progress achieved till then.
- 8.3 This is to reiterate that the Railway reserves the right of determining the contract at any stage of review of the progress under (a)above, if the above agreed programme(s) are not adhered to within the margin of 10% as envisaged in Clause 62(1)(viii) of the General conditions of Contract and the Performance Guarantee will be forfeited.
- 8.4 Non-submission of the programme(s) as envisaged in (a)above shall also tantamount to breach of contract by the contractor and the Railway shall be entitled to terminate the contract on account of the contractor's default under clause 62 of the General Conditions of Contract, for this lapse alone.

9.0 STORES DEPOT FROM WHERE THE MATERIALS SUPPLIED BY RAILWAYS ARE TO BE COLLECTED BY THE CONTRACTOR: Stores depot of Dy. CSTE/Project/SBC at Doddajala, Bengaluru.

10.0 RIGHT TO RAILWAY TO KEEP BACK FROM THE CONTRACT OR ANY PORTION OF THE WORK.

The successful Tenderer will however, have no claim or right in the execution of work which in the opinion of the Engineer should be carried out departmentally or otherwise and the Railway reserves the right that any time after acceptance of the tender, to keep back from the contract and carry out the work or any portion of work, through any other agent. No claim for compensation/loss or whatsoever on this account will be entertained by the Railways.

11.0 INSPECTION AND MAINTENANCE OF SITE:

- 11.1 The Contractor before tendering shall inspect the site of work, examine the nature of soil to be excavated, nature of work to be executed, checkup the availability of working space and other constraints if any and also acquaint himself of the available access to the site of work and make due provision in the rate for all such contingencies.

- 12.0** The contractor shall make his own arrangement for site clearance without any extra payment. If any heavier materials like Railways sleepers etc., are to be shifted from the site of work, the same should be carried out by the contractor for which separate payment will be made under relevant items of SOR 2011(Southern Railway), whichever is applicable. Contractor is also responsible to clear all construction debris, labour camps, and surplus materials from site of work without any extra payment as and when these are not required for the progress of the work.

13.0 Procurement of Material:

Procurement of S&T Items has to be planned by the contractor in consultation with the Engineer and procurement plan shall be got approved from the ENGINEER before placing any orders for such materials.

Procurement Plan should be prepared in such a manner that those materials which have a shelf life may be procured in a staggered manner so that the materials are used before its properties get modified with age. The procurement of materials shall be planned as per the milestone/key activities specified in the SCC/Tender document. If the material/product does not remain of required specifications at the time of its actual use, the same will be replaced by the contractor with materials conforming to Specifications at his own cost.

The procurement of materials for the works by the contractor shall also be subject to the following:

The contractor shall prepare Schedule wise procurement plan and submit a statement in the following format:

Procurement Plan- Installment No.1				
Item	Description	Schedule	Quantity planned	Justification for placing order
No.		Quantity as per	for procurement	for procurement (lead, likely
		Agreement		month of execution / installation)

Certified that all efforts have been taken to ensure that the quantity of materials being planned for procurement is as per the Schedule and as per the requirement at the site based on approved drawing.

Contractor

Approved

ENGINEER

- 13.1 If the Contractor is required to purchase certain material(s) from firms in the approved list of RDSO/Zonal Railways, as per terms and conditions of the contract, then the Contractor shall place orders accordingly on firms appearing in the approved list, as specified, on the date of placing the order. In case the contractor places an order on an approved firm, but the firm is subsequently de-listed before the supply is completed, then in such cases, if there are any outstanding orders on the de-listed firm, then wherever the balance delivery period is available the extent of supply made by the firm within the original delivery period, shall be accepted provided it passes the inspection of RITES/RDSO/inspecting authority specified in the contract. If the de-listed firm fails to deliver the material within the original delivery period, no extension shall be granted by the Contractor to such firms after date of issue of de-listing order. In case where delivery period has expired, no extension shall be granted and all such orders shall be cancelled and a fresh purchase action should be taken.
- 13.2 Suitable sites on Railway land, if available, would be provided to the contractor for the erection of temporary labour camps at free of charge. Also, the plant and materials etc. so procured for the works shall be properly stored on site and protected against loss, damage or deterioration. For this purpose, the contractor shall make necessary arrangements of godown/store at site in Railway land, provided at free of charge if available, and make all own-fenced area units of temporary store godown. In case the contract is terminated, the Employer shall have the right to take possession of the godown/store and reasonable cost of the temporary store/godown shall be determined by the Engineer and included in the Final Payment Certificate.

14.0 INTERFACING AND INTEGRATION OF WORKS:-

- 14.1 As a part of this proposed work, interfacing for the purpose of integration of works between different Contractors of Civil and Electrical and other S&T contractors is of very much importance so that progress of work is not hampered. Coordination between all agencies has to be ensured. Such interfacing for the purpose of integration of works will arise between the partners of JV, in case the work is awarded to a JV or between the Contractor and his sub- contractors will arise or among different contractors, wherever permitted/applicable. This has to be kept in view.
- 14.2 The contractor shall take full responsibility in terms of organizing, managing, coordinating and administrating the interfacing of all components of works including all issues related to and arising out of such tasks and responsibility. The contractor shall interface with all concerned authorities and other contractors as required to complete the work satisfactorily within the stipulated period.
- 14.3 Under consideration and application of the above clause, the contractor shall and

has also the obligation to liaise with the other contractors and Authorities to obtain all necessary technical information, all necessary information concerning organization of works, coordinating the works etc. which are necessary to assess, mitigate, take care of contractual obligations, risks, liabilities and whatsoever arising out of interfacing, engineering issues, organization of the works etc. The employer/engineer shall not be held liable in any way, throughout the preparation of the offer and/or execution of the works and/or maintenance period and/or defects liability period for any omissions, misunderstanding, negligence etc. arising out of interfacing, coordinating, organizing etc. of the works. The employer will not entertain any claim arising out of misunderstanding, miscommunication, omission, withholding of necessary/required information or whatsoever between the concerned contractors/Authorities concerning interfacing, organizing etc. of works. In case of any claim arising from any of the contractors, as aforesaid, referring to interfacing and/or interfacing related issues, the Employer will hold the concerned contractors liable for not taking care of their contractual obligation concerning interfacing, organizing, co-ordination etc. of the related works.

- 14.4 It is the intention of the ENGINEER/Railway that the overall interfacing, planning, scheduling, logistic administration inclusive of necessary logistic planning and all tasks that are necessary to guarantee proper co-ordination and proper interfacing of all activities during the complete execution of the works, is clearly understood and agreed to. Integrated programme shall set out in detail how the different contractors will work together in execution of the works. It shall also spell out the overall interfacing, planning, scheduling,
- 14.5 logistic administration inclusive of necessary logistic planning and all tasks that are necessary to guarantee proper co-ordination and proper interfacing of the different activities by various agencies during the execution of the works. A master schedule incorporating the milestone of works completion by each contractor shall be included in the integrated programme to demonstrate the capability of all parties involved in the completion of the works wherever applicable. The essence of the integrated programme shall be that the contractors have both overall responsibility for the completeness and the timeliness of all the works and quality of the contractual works within the agreed time frame. Allowance need to be made by the contractors in their resources and pricing to ensure that proper co-ordination of the various items is incorporated in their contract.
- 14.6 The contractor shall strictly adhere to the work plan made for works requiring interfacing. Any delay either on his part or on the part of other agencies and other bottlenecks that could affect the pace of works shall be informed to the Engineer in time so as to enable him to take corrective steps.
- 14.7 If, in the opinion of Engineer, any delay in execution of any part of the Project requiring interfacing is attributable to the failures of the contractor to take adequate

steps for smooth execution of such works, then the Engineer shall have the right to take necessary steps to organize and streamline such works, including excluding the requisite portion of work from the scope of the Contractor and getting the same executed by other agencies, at the risk and cost of the contractor.

15.0 Damages to property:

The contractor shall organize all his activities so as not to cause any damage to the property of Railway or that of other agencies or any third party. In spite of taking all precautions, in the unfortunate event of any damage to the property, then the contractor shall not only indemnify the Employer of the claims made by the affected parties but also settle the matters with the affected parties as per law. If the nature of damage is one of that affecting the train movements or causing a safety hazard to the public.

16.0 Equipment

The Bidder shall deploy, the minimum number of equipment for execution of the work as per the mutually agreed programme.

17.0 INSPECTION AND MAINTENANCE OF SITE:

17.1 The Contractor before tendering shall inspect the site of work, examine the nature of soil to be excavated, nature of work to be executed, check up the availability of working space and other constraints if any and also acquaint himself of the available access to the site of work and make due provision in the rate for all such contingencies.

17.2 The contractor shall make his own arrangement for site clearance, clearance of debris, jungle, bushes etc., without any extra payment. If any heavier materials like Railways sleepers etc., are to be shifted from the site of work, the same should be carried out by the contractor for which separate payment will be made under relevant items of SOR whichever is applicable. Contractor is also responsible to clear all construction debris, labour camps, surplus materials from site of work without any extra payment as and when these are not required for the progress of the work.

18.0 IMPOSITION OF FINE FOR DELAY OF WORKS:

In the event of the contractor not adhering the agreed programme of work and/or achieving the milestones specified, the Railway reserves the right of levying a "FINE" as deemed fit by the Engineer-in-charge based on the merit of the case. Subsequent to the imposition of the "FINE", if contractor makes good the progress and achieves the milestones to the satisfaction of the Railways, part or full amount of the fine imposed under this clause will be released to the contractor at the discretion of the Engineer-in-charge. However, on account of the extension granted, in case of actual or anticipated damages occurring to the Railway, the recovery of agreed/liquidated damages will also

be imposed and recovered from contractor's dues in addition to the "FINE" as per provisions in GCC.

19.0 SITE ORDER BOOK:

An Inspection Register/ Site Order book shall be maintained at the site of work by the contractor, wherein the Engineer In charge of the work or his executive subordinate shall record instructions regarding the working etc. It is expected that the Contractor or his representative at the site shall note such instructions whenever asked upon to do so and take action accordingly. This register shall have entry on day-to-day basis regarding the progress of work. Record should also be kept with joint signature of Railways & firms representative for all release wiring (if any) too. This should be produced during the inspection & check of Railway engineer in-charge along with drawing showing new installation locations.

20.0 STORES TO BE SUPPLIED BY CONTRACTOR:

- 20.1 All materials mentioned in the schedule of material and works required for the execution of the contract, shall be arranged and supplied by the Contractor as to realize the end objective.
- 20.2 The material mentioned in the schedule shall be supplied in the stores of the SSE/Proj/Stores/SBC@Doddajala.
- 20.3 The material required for work at site will be issued to the contractor by Stores In charge i.e by SSE/Project/Stores/SBC @ Doddajala. The transportation of material from stores to site of work will be the responsibility of contractor. Railways will pay transportation charges per ton/Km transported from Railway stores to the nearest Railway station of the work site as per rates in the schedule in the LOA.
- 20.4 The contractor will be responsible for the safety of the material at site from the date of issue to the date of commissioning of the system.
- 20.5 Stores In charge will keep record of material on day-to-day basis in summarized form and shall convey monthly position of store (supplied by and issued to the contractor) to the engineer in-charge of the work.

21.0 TEST & MEASURING INSTRUMENTS, SPECIAL TOOLS AND INSTALLATION MATERIAL:

- 21.1 All tests and measuring instruments and other arrangements required for all the acceptance tests shall be made available by the contractor free of cost for conducting

the tests.

- 21.2 Special tools required for installation and maintenance of all the equipments shall be arranged by the contractor in adequate quantities. The contractor shall provide all installation material for complete commissioning of the system.

22.0 VITIATION CLAUSE: Vitiating during Variation in Contract Quantities

- 22.1 A contract shall be considered “vitiating” only when, the following percentage variations in contract value between tenderers are noticed to have been exceeded.

SN	Value of Contract	Percentage difference between present Contractor and new L-1 as a result of variation. (percentage shall be calculated with base as the revised contract quantities multiplied by the rates of the present contractor)
1.	Small value contracts (Tender Value less than Rs 50 lakh)	10
2.	Other than small value contracts (Tender Value equal to or more than Rs. 50 lakh)	5

When the percentage difference between present Contractor and new L-1 is noticed as becoming beyond the values specified above, the following action shall be taken.

The Railway administration should immediately examine whether it is practicable to bring in a new agency to carry out the extra quantity of work keeping in view the progress of the work in accordance with the original contract and the nature and lay-out of the work. If it is found that there will be no serious practical difficulty in meeting the additional quantity of work done by another agency, then fresh tenders for the extra quantity may be invited otherwise negotiating the rate with the existing contractor for arriving at a reasonable rate for the additional quantities of work, may be adopted.

The above shall be regulated as under:

- (i). The case shall be decided by the tender accepting authority (competent for the revised quantity) and shall not be treated as a case of single tender. The provisions of Railway Board letter No. 2007/CE.I/CT/18/Pt.XII dated 31.12.2010.
- (ii). These instructions will be similarly applicable to earning contracts with H-1, H-2 substituted for L-1, L-2 and so on.
- (iii). Executives while executing the work shall make all efforts to ensure that no vitiating takes place in normal circumstances. Vitiating should be an exception rather than a routine affair. Efforts should be made to invite bids on the basis of percentage above/below/at par.

- (iv). Vitiating should always be computed with respect to the items, rates, quantities and conditions as available at the time of Tender Opening and subsequent changes/additions by way of new items will not be counted for computing Vitiating.

23.0 WARRANTY:

- 23.1 The contractor shall warranty that all materials and equipment to be supplied and installed as per this tender shall be free from defects and faults in design, material, workmanship and manufacture and shall be of the highest grade and consistent with the established and generally accepted standard for materials of the type ordered and in full conformity with the contract specification.
- 23.2 This warranty shall be for a period of 12 Months from the date of completion of the work, i.e. date of issue of the Provisional Acceptance certificate as defined in Special Conditions of Contract.
- 23.3 During the period of Warranty, the Contractor shall remain responsible to arrange replacement and for setting right at his own cost any equipment supplied by him which is of defective manufacture or defective design or defective material/component becomes unworkable due to any cause whatsoever. The decision of Railway to attend to any damage or defect in work shall be final and binding on the contractor.
- 23.4 If it becomes necessary for the contractor to replace or renew any defective portions of the system under this clause, the provision of this clause shall apply to the expiry of six months from the date of which replacement or renewal or until the end of the warranty period whichever may be later. If any defect is not remedied within reasonable time, the Railway may proceed to do the work at contractor's risk and expense, but without prejudice to any other rights, which the Railway may have against the contractor in respect of such defects.
- 23.5 All inspections, replacements or renewals carried out by the contractor during the warranty period shall be subject to the same conditions of the contract.
- 23.6 All replacement and repairs and design change that the Railway shall call upon the
- 23.7 contractor to deliver or perform under this warranty shall be delivered and performed by the contractor within one month, promptly and satisfactorily.
- 23.8 The decision of the Railway in regard to contractor's liability and the amount, if any, payable under this warranty shall be final and conclusive.
- 23.9 Due to analysis of failures, if any design deficiency is pointed out by the Railway, the contractor shall rectify it at his own cost.

24.0 Penalties during Warranty & Maintenance Period:

Failure to replenish the spare stock of the Railways, utilized by the contractor for the purpose of maintenance during the warranty period within 45 days, will invite a penalty

of 5% of the cost of the Railway's spare per week or part thereof up to 3 months. Beyond three months, Railway will be free to procure the spare items at cost of the contractor. Permission to use Railway's spare stock supplied against the contract does not absolve contractor of his responsibilities of keeping his additional spare stock also for immediate attending to defects.

25.0 FINAL ACCEPTANCE

- 25.1 The final acceptance of the entire equipment installed in the section shall take effect from the date of expiry of the period of maintenance, after testing and certification of engineer in-charge.
- 25.2 The contract shall not be considered as completed until the issue of Final Acceptance Certificate by the Purchaser.
- 25.3 The purchaser shall not be liable to the contractor for any matter arising out of or in connection with the contract or execution of the work unless the contract shall have made a claim in writing in respect thereof before the issue of Final Acceptance Certificate under this clause.

26.0 Notwithstanding the issue of Final Acceptance Certificate, the contractor and the purchaser (subject to Sub Clause as above) shall remain liable for fulfillment of any obligation incurred under the provision of the contract prior to the issue of Final Acceptance Certificate which remains unperformed at the time such certificate is issued and for determining the nature and extent of such obligation the contract shall be deemed to remain in force between the parties hereto. MEASUREMENT OF WORKS 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.

27.0 MEANING AND INTERPRETATION BY RAILWAYS TO BE FINAL

All measurement, method of measurement, meaning and intent of specifications and interpretation of Special Conditions of Contract, given and made by the Purchaser or by the Purchaser Engineer shall be final and binding and shall be considered "accepted matters" in terms of conditions laid down in the General Conditions of Contract.

28.0 TERMS OF PAYMENT:

All bills shall be submitted by prime bidder only (to whom contract has been awarded) to the concerned authority. On Account Payment" for Supply of equipments, materials will be made on receipt of equipment/ materials, as indicated in respective tender schedules at Railway's nominated depot. On Account payments made will subsequently be adjusted against payments due on Provisional Acceptance or Final Acceptance.

On account payment during supply of any schedule item that involves only supply (or) Supply and installation, shall be allowed only after submission/issuance of

- 28.1 Acknowledgement of receipt of materials at Railway's nominated depot by the Purchaser's Store custodian.
- 28.2 Original Inspection certificates issued by Inspecting Officer of Railways/RDSO/RITES as applicable.
- 28.3 Challan/ Invoice in duplicate.
- 28.4 A Certificate to be submitted by the Contractor that the materials supplied are as per the contract and the amount claimed in the invoice is correct as per the terms of the contract.
- 28.5 Indemnity bond in the approved form (see Proforma 11).

SI	Nature of Schedule Item	On account Payment Schedule
1	Electronic Interlocking Items	70% value of each consignment shall be paid on receipt of EI cards. 10% after supplying the relays and wire coils. 10% after installation, testing and commissioning of whole system covering all the materials and services as per schedule of work to full satisfaction of Railways. 10% Remaining after issue of "Provisional acceptance certificate and submission of As made documents".
2	Pure Supply items: Other than EI	90% value of each consignment shall be paid on receipt of materials 10% value of the supply items shall be paid after issue of "Provisional Acceptance Certificate"
3	Pure Supply items: Supply, for which no installation is involved.	100% payment against Measuring Instruments, Tool Kits, and if any similar items, which is not part of installation and commissioning

4	Pure Execution items viz. trenching and protective works and cable laying activities and related activities.	75% of payment after certification of closing of trench duly laying the cables and other protective arrangements certified by engineers' representative <u>.Video recording of the same, if available in schedule has to be submitted for the portion of claim.</u> 15% of the progress payment for these items shall be made after terminations and end to end testing from relay room to function end are completed and jointly tested by the Engineer to his satisfaction. 10% value of the works/ services completed shall be made after the issue of Provisional Acceptance Certificate and submission of all 'As made' documents of the relevant schedules.
5	Pure Execution items viz. Installation/Design/Other items.	90% value of the work/ services will be made after the works are completed to full satisfaction of Railways. 10% value of the works/ services completed shall be made after the issue of Provisional Acceptance Certificate and submission of all 'As made' documents of the relevant schedules.
6	Supply and Installation of Equipment/Sub system. i.e other than Routers and Switches	75% of the accepted rate of the schedule item will be paid on complete supply of the equipment listed in the schedule 15% payment will be released only after successful installation of the equipment under the schedule. 10% will be released after the issue of Provisional Acceptance Certificate and submission of all 'As made' documents of the relevant schedules. Note for Spare Items: 10% payment of value of supply items, which could not be installed for want of site readiness, will be made on issue of PAC, as per the decision of Dy CSTE. For spares, 10% will be made after the issue of PAC

7	Supply and Installation of Software items	For software items, payment will be made for the software/licenses supplied in stages for various items supplied. a) 40% payment of the items would be made on receipt of software/licenses by the consignee duly inspected and on submission of the documents. b) 40% payment of the value of items shall be made by Railway on installation & commissioning of stations/sites c) 10% payment on issue of Provisional Acceptance Certificate (PAC). d) Remaining 10% payments will be released along with the final Bill. e) (40% + 10%) payment of value of software items which could not be installed for want of site readiness or as per the decision of Dy CSTE, will be made on issue of PAC, each separately.
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29.0 Payment of Other Items:

- 29.1 100% payment of items (except those mentioned in paras below) shall be made by Dy CSTE on successful Installation, Testing and Commissioning of the stations/sites.
- 29.2 Payment towards "Training of personnel over and above the on-site training during the installation, maintenance and supervision period as detailed in the tender document" shall be made by Dy CSTE on successful completion of specified trainings.
- 29.3 For AMC, a separate agreement will be executed by the concerned Division and payment for the same will be made by the respective Division. For work at stations, Payment towards" AMC/Long term maintenance Support" would be paid quarterly by the concerned Division after satisfactory completion of AMC Services of that quarter and based on a certificate furnished by the concerned Railways representative of the Division.
- 29.4 All the invoices raised by the bidder will be raised in the name of Dy CSTE/Sr DSTE and corresponding payments will be made by Railway.
- 29.5 Accounting unit/bill passing unit for the supplies under SOQ is Dy CSTE/P/SBC. Bills to be submitted to the authorized representative of Dy CSTE for certifying receipt of material & services, for passing for payment. For AMC, Sr.DSTE of the Division will be nodal officer.

- 29.6 The breakup of taxes has to be furnished and the same should be reflected in the bills. All invoices will be raised by the contractor state wise.
- 29.7 In case of imported equipment Anti-Dumping duty if applicable on the equipment proposed to be supplied by OEM/Tenderer as per extant instructions of Ministry of Commerce/Finance Government of India, has to be borne by the tenderer and shall be deducted from the amount payable to the bidder at the time of making payment to the firm, if this duty amount is paid to Custom Authority by Railway.
- 29.8 In case of any conflict regarding classification of Schedule item among above 6 On account Payment Schedules, Decision of ENGINEER is FINAL. Subject to any deductions or recovery which the Railway may be entitled to make under contract, the Contractor will be entitled to be paid from time to time by way of 'on account payment' for supply of goods and 'progress payment' for works as in the opinion of the Engineer he has executed in terms of Contract.

30.0 FINAL PAYMENT:

On the basis of provisional acceptance certificate issued by the Engineer for all the works in all the sections covered in this contract, the final bill for the balance payment for each item/sub-item of work shall be submitted by the Contractor along with a clear "NO CLAIM CERTIFICATE". The provisional acceptance certificate shall be issued by the Engineer after compliance as defined in Para.6.2 above.

31.0 FINAL SETTLEMENT:

On expiry of the Maintenance period and issue of certificate by Engineer-in-charge regarding satisfactory completion of work and final acceptance of the entire installations in all respect, **Security Deposit** will be released to the Contractor after adjustment of any dues payable by the contractor.

32.0 DEDUCTION FROM ON ACCOUNT PAYMENT BILLS

- 32.1 All costs, damages or expenses, which Railways may have paid or incurred, which under the provisions of contract are Contractor's obligations, will be deducted by Railways from progress payment bills/invoice of Contractor, as and when it is understood that such an expenses have been incurred or paid for.
- 32.2 All such claims of Railways shall, however, be duly supported by appropriate and certified vouchers, receipts or explanations as are available to enable the Contractor to identify such claims.

33.0 Recovery of sales Tax/Other Taxes/Royalty Etc.:

This tender falls under Civil Works Contract, like all other works contract which attracts specific percentage of Sales Tax under the concerned Act. Sales Tax on the works contracts, as applicable in terms of concerned State Government Sales Tax Acts as amended from time to time shall be deducted from the running bills of contractors for

payment to the State Government. The Railway Administration will give a certificate towards the tax deducted at source to enable them to file Sales Tax return before the concerned authorities. No refunds of sales tax deducted at source will be made by Railway. The Sales Tax elements that might have gone into prices of various raw materials used by the contractor in the works concerned, distinct from the Sales Tax deducted as above, will also, not be reimbursed by the Railway Contractor should quote their rates taking into consideration the above recovery towards Sales Tax to be made by Railway. In other words, the rate should be inclusive of Sales Tax to be recovered by Railway.

The rate quoted by the tenderer should take into account any other Taxes and royalty charges payable to State Government or any other department for sand, earth, ballast/stone or any other material including surcharge etc. Railway will not pay any such charges levied upon tenderer and tenderer will only be paid at the rate accepted by the Railway administration.

A cess at the rate of 1% (ONE PERCENT) of the cost of construction will be recovered from the contractual payments in terms of Building and other constructions Workers Welfare Cess Act 1996 as per notification no.S.O.2899 dated 26th September 1996, Gazette of India, extending 12.10.1996.

34.0 TAXES AND ROYALTY CHARGES:

- 34.1 This tender falls under the category of Works contracts which attract provisions of GST under Central Goods and Services Taxes, 2017. All the bidders/ tenderers should ensure that they are GST compliant and their quoted tax structure/ rates are as per GST law. TDS/Income tax will be deducted at 2% (two percent) and also surcharge if any at source from each bill unless otherwise authorized by the Income-Tax department.
- 34.2 Provisions of “The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996” and “The Building and Other Construction Workers’ Welfare Cess Act, 1996”:
- 34.3 The tenderers, for carrying out any construction work, shall get themselves registered with the Registering Officer under Section-7 of the Building and Other Construction Workers Act, 1996 and rules made thereto by the concerned State Govt., and submit certificate of Registration issued from the Registering Officer of the concerned State Govt. (Labour Dept.). The Cess shall be deducted from Contractor’s bills as per provisions of the Act subject to amendments, if any, in the Act from time to time.

35.0 Rates, GST Exemption & Format for bill of Supply:

- 35.1 The rate quoted by the tenderer should take into account applicable GST and Cess on GST (if any) thereof. Railway will not pay any such charges levied upon tenderer

and tenderer will only be paid at the rate accepted by the Railway administration under the Contract.

- 35.2 GST exemption for Railway equipment and materials moved by Indian Railways for its own consumption across various states:
- 35.3 As per section 31(3)(C) of the CGST Act – 2017, Bill of Supply in a prescribed format as mentioned in Rule no. 49 of Chapter VI of the CGST Rules- 2017 accompanying such consignments, has to be issued by Railways while transferring goods that are considered as exempted in case the value is more than Rs.200/-.
- 35.4 Transfer of goods/stores from one State/UT to another State/UT is considered to be an exempted activity as per section 7(1) of the CGST Act -2017 read with clause 1(b) of Schedule II of the CGST Act – 2017
- 35.5 While transferring Railway Materials from the Depot/Workshop/Shed/Stock holder in one State to another State, it may be ensured that the Bill of Supply accompanies such consignments. A declaration may also be given in the Bill of Supply that-
- 35.6 “This transfer of Railway Materials [description of material to be indicated] from the Depot/workshop/Shed/Stock holder of --- [Name of the Zonal Railway and the State (Originating Depot), GSTIN] to the Depot/workshop/Shed/Stock holder of ----- [Name of the Zonal Railways and the State (Destination), GSTIN], is without any transfer of title of the said goods, and is treated as supply of service between two distinct persons as defined in section 25(4) of the CGST Act, 2017 (CGST Act, 2017). As per Section 7(1) of the Central Goods and Services Tax Act, 2017 (CGST Act, 2017) read with Clause 1(b) of Schedule II of the CGST Act, 2017, this inter- state supply of service by the Central Government (Ministry of Railways) to Central Government (Ministry of Railways) is exempt from the levy of IGST vide Sl.No.8 of the Notification No. 9/2017 – Integrated Tax (Rate) dated 28.06.2017”.

36.0 Format for Bill of supply:

- i. Name, address and Goods and Services Tax Identification Number of the supplier;
- ii. A consecutive serial number not exceeding sixteen characters, in one or multiple series, containing alphabets or numerals or special characters –hyphen or dash and slash symbolized as “-”and “/” respectively, and any combination thereof, unique for a financial year;
- iii. Date of its issue;
- iv. Name, address and Goods and Services Tax Identification Number or Unique Identity Number, if registered, of the recipient;
- v. Harmonized System of Nomenclature Code for goods or services; (vi). Description of goods or services or both;

- vi. Value of supply of goods or services or both taking into account discount or abatement, if any; and
 - vii. Signature or digital signature of the supplier or his authorized representative:
 - viii. Provided further any tax invoice or any other similar document issued under any other Act for the time being in force in respect of any non-taxable supply shall be treated as a bill of supply for the purposes of the Act.
- 36.1 Tenderer should quote his/their rates taking into consideration the above complete and no claims whatsoever made by the contractor shall be entertained. This clause is an Excepted Matter as per Clause 63 of General Conditions of Contract and in case the Contractor resorts to claims and demands arbitration, the same shall be excluded from arbitration at all stages.
- 36.2 With GST Act in force, it will be the responsibility of service providers (i.e., contractors) to submit the invoice (bill) duly segregating the GST component from the gross amount of work executed. The procedure as mentioned below will be followed while dealing with contractual bills.
- 36.3 All works contracts are to be provided with goods/service code based on the type of contract. In case contract consists of both goods & service, then interpretation regarding nature of contract
- i. Shall be done as per clause 8, Chapter III of CGST Act, 2017. The goods/service code is notified by Ministry of Finance and can be downloaded from the website www.cbec.gov.in.
 - ii. The 'on account/ final contract certificate' shall be prepared by the Railway on the basis of quantity of work executed and agreement rates, duly segregating the GST component as detailed in para (iii) below.
 - iii. Since the agreement rates of contracts are inclusive of all taxes, the calculation of 'Gross amount of work executed, 'Amount of work executed excluding 'GST amount' and 'GST amount' in the 'on account / final contract certificate' shall be done as under:

Let,

 $Z = \text{Gross amount of work executed on the basis of quantum of work executed and agreemental rates(including GST).}$

 $X = \text{Amount of work executed excluding GST amount.}$

 $Y = \text{GST amount as per applicable GST rate for that goods/service code. } R = \text{Percentage rate of GST for that goods/ service code}$

Then,

 $Z = X+Y, Y=X*R/100.$

Percentage rate of GST for various types of good/services as finalised by GST council can be downloaded from the website www.cbec.gov.in.

Once the 'on account / final contract certificate' is prepared by railway and communicated to contractor, the contractor shall submit invoice (bill) on his Letter head duly segregating the 'Amount of work executed excluding GST amount' and 'GST amount' (i.e. "X" & "Y" as mentioned in Clause 34.1.(iii) above) along with Invoice No. (Bill No.) and all other details required under GST Act.

- (i). In case contractor is liable to be registered under GST Act, Railway shall pay to the Contractor 'Gross amount of work executed' (i.e. "Z" as mentioned in Clause 34.1.(iii) above) duly deducting all other liveable taxes like I/Tax, labour cess, royalty etc. as applicable. Contractor shall be liable to pay 'GST amount' to respective authority himself. Whereas, railway shall deposit all other taxes deducted to concerned authority as is being done presently.
- (ii). In case contractor is not liable to be registered under GST Act, contractor shall be paid "Amount of work executed excluding GST amount" (i.e. "X" as mentioned in Clause 34.1.(iii) above) duly deducting all other liveable taxes like I/Tax, labour cess, royalty etc. as applicable. Railway shall deposit 'GST amount' as well as all other taxes deducted to concerned authority.
- (iii). In case any need arises to modify the Invoice (Bill) due to any reason, contractor shall submit amended fresh invoice for processing the payment.

37.0 INSURANCE OF MATERIALS AND INSTALLATIONS:

- 37.1 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 provisional acceptance certificate is issued.
- 37.2 Minimum amount of insurance by the Contractor for Works and Contractor's Plant and Materials including loss or damage to equipment shall be 75% LOA value. This insurance policy/Certificate shall be submitted before executing the contract agreement after issuance of Letter of Acceptance.
- 37.3 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 Purchaser and if required by the Purchaser, be made good by the contractor, at the cost of the Purchaser.

- 37.4 The contractor should, however insure the stores brought to site against risks in consequence of war and invasion as required under emergency risk (goods insurance) act in force from time to time.

38.0 IMPOSITION OF FINE, PENALTY AND COST OF DAMAGES FOR DELAY OF WORKS:

In the event of the contractor not adhering to the agreed program of work and / or not achieving the milestones or quality of work etc., specified, even if no physical or actual damages have occurred to the Railways and even if the currency of the work is not affected, the Railway reserves the rights of, with a view to improve, expedite and the make the contractor realize the effects of delays, levying fine or any value as deemed fit on the contractor by the Engineer – in – charge based on the merit of the case. The amount of fine will be solely decided by the Engineer – in – Charge at his discretion and will be based on his assessment of disturbances, difficulties or losses caused by the delay or poor quality of work, etc., including that of the reputation of the Railway. The contractor shall have no claims what-so-ever in this regard. Subsequent to the imposition of the fine, if contractor makes good, the progress / quality and achieves the milestones to the satisfaction of the Railways, part or full amount of the fine imposed may be waived and the amount so worked out will be released to the contractor at the sole discretion of the Engineer –in – charge duly recording necessary certification to the effect that no damages have occurred. However, in case of actual or anticipated damages occurred or occurring to the Railways, the recovery of agreed / liquidated damages will also be imposed and recovered from contractors dues as per provisions in IRSGCC in addition to the above fine.

39.0 MOBILISATION ADVANCE: Applicable only for Advertised tender of value more than Rs 25.00 Crores

The tenderer /contractor may be granted a recoverable interest-bearing mobilisation advance up to 10% of the contract value provided mobilisation advance is admissible as per the tender conditions and he specifically applies for it while tendering. Tenderers may submit their request for grant of Mobilisation Advance in **Proforma-8** attached with Tender Document. If the tenderer fails to apply specifically for Mobilisation Advance while giving his offer at the tendering stage in case where grant of Mobilisation Advance is permissible, no subsequent requests from him for grant of this advance will be entertained. The advance shall carry an interest at the rate to be decided by the Railway Board and communicated at the beginning of every financial year, to be applicable for the tenders to be opened in that financial year. For the tenders to be opened in the financial year 2019-20, the rate of interest as communicated by Railway Board is 10% (Ten percent only) per annum. For subsequent years, after 2019-20, the rate will be communicated separately.

- 39.1 The grant of Mobilisation Advance is subject to condition that a contractor does not receive advances for same work from different officers. The advance will be granted in two instalments viz., 5% of the contract value on signing of the contract agreement

and the balance 5% on Mobilisation of site establishment, setting up offices, bringing in equipment and actual commencement of work.

- 39.2 The 1st stage of advance shall be payable immediately after signing of contract documents. The 2nd stage of advance shall be payable at the time of mobilisation, after submission of a utilization certificate by the contractor that the stage 1 advance has been properly utilized in the contract.
- 39.3 Each installment will be released on submission of a security in a form acceptable to the Railway. The advance shall be payable against irrevocable guarantee (Bank Guarantee, FDRs, KVPs/NSC) of at least 110% of the value of the sanctioned advance amount (covering principal plus interest). The Bank Guarantee shall be from a Nationalized.
- 39.4 Bank in India or State Bank of India in a form acceptable to the Railways.
- 39.5 The tenderer who seeks Mobilisation Advance should be specific about the course of action proposed to be followed in producing the security to the satisfaction of the Railway. Each security should be at least not less than one lakh rupees. These securities shall be returned as and when the value of the advance plus interest is recovered from the running bill.
- 39.6 The recovery shall commence when the value of contract executed reaches 15% of original contract value and shall be completed when the value of work executed reaches 85% of the original contract value or assessed value whichever is less. The instalments on each "on account bill" will be on pro-rata basis.
- 39.7 Method of recovery of interest - Interest shall be recovered on the advance outstanding for the period commencing from the date of payment of advance till date of particular on-account bill (through which recovery of principal is effected) and adjusted fully against on-account bill along with pro-rata principal recovery. In the event of any short- fall, the same shall be carried forward to the next on-account bill and shall attract interest.
- 39.8 The Mobilisation Advance granted shall be returned back to the Railway in case the work is not completed in the original contract completion period.

40.0 Special condition for Disposal of Construction and Demolition Waste:

In exercise of the powers conferred by sections 6, 25 of the Environment (Protection) Act, 1986 (29 of 1986), and in supersession of the Municipal Solid Wastes (Management and Handling) Rules, 2000, except as respect things done or omitted to be done before such supersession, the Central Government notified the rules for Management of Construction and Demolition Waste by publishing in the Gazette of India Part-II Section 3 Sub-section-ii dt.29.03.2016. Being waste generator, rules indicated under Para 4 and as a service provider rules under Para 5 are to be followed by Indian Railways through

agencies and same are reproduced as follows and any subsequent amendment thereof through notification by Government of India will be applicable in terms of Law of Governing of Contract.

- (a). The tenderer shall remove all construction and demolition waste and clean the area every day, if possible, or depending upon the duration of the work, the quantity and type of waste generated, appropriate storage and collection, a reasonable timeframe shall be worked out in consultation with the concerned local authority. The tender shall prima-facie be responsible for collection, segregation of concrete, soil and others and storage of construction and demolition waste generated, as directed or notified by the concerned local authority in consonance with rules
- (a) The tenderer shall ensure that other waste (such as solid waste) does not get mixed with this waste and is stored and disposed separately.
 - a. The tenderer who generates more than 20 tons or more in one day or 300 tons per project in a month shall segregate the waste into four streams such as concrete, soil, steel, wood and plastics, bricks and mortar and shall submit waste management plan and get appropriate approvals from the local authority before starting construction or demolition or remodeling work and keep the concerned authorities informed regarding the relevant activities from the planning stage to the implementation stage and this should be on project to project basis.
 - b. The tenderer shall keep the construction and demolition waste within the premise or get the waste deposited at collection centre so made by the local body or handover it to the authorized processing facilities of construction and demolition waste; and ensure that there is no littering or deposition of construction and demolition waste so as to prevent obstruction to the traffic or the public or drains.
 - c. The tenderer shall pay relevant charges for collection, transportation, processing and disposal as notified by the concerned authorities; Waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month shall have to pay for the processing and disposal of construction and demolition waste generated by them, apart from the payment for storage, collection and transportation. The rate shall be fixed by the concerned local authority or any other authority designated by the State Government.
 - d. In case of the tender have no logistics support to carry out the work, they shall tie up with the authorized agencies for removal of construction and demolition waste and pay the relevant charges as notified by the local authority.

Note: Tenderer is responsible for penal action imposed by responsible authority towards non implementation of above provisions.

41.0 PROGRESS REPORTING

The contractor shall submit the periodic progress reports at regular intervals regarding

the state 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.

42.0 MAINTENANCE PERIOD

- 42.1 The maintenance would be valid for a period 36 months between issue of last PAC and FAC
- 42.2 The supplier shall warrant that stores to be supplied shall be new and free from all defects and faults in material, workmanship and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards of materials of the type ordered and shall perform in full conformity with the specifications and drawings. The supplier shall be responsible for any defects that may develop under the conditions provided by the contract and under proper use, arising from faulty materials, design or workmanship such as corrosion, inadequate quantity of material to meet equipment requirements, inadequate contact protection, deficiencies in design and/ or otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser who shall state in writing in what respect the stores are faulty.
- 42.3 If it becomes necessary for the contractor to replace or renew any defective portion/portions of the supplies under this clause, the provisions of the clause shall apply to the portion/portions of the equipment so replaced or renewed or until the end of the above-mentioned period or twelve months, whichever may be later. If any defect is not remedied within a reasonable time of 30 days, the Purchaser may proceed to do the work at the contractor's cost, but without prejudice to any other rights which the Purchaser may have against the contractor in respect of such defects
- 42.4 Replacement under maintenance shall be made by the contractor free of all charges at site including freight, insurance and other incidental charges.

a) Maintenance support

- i. Material for repair during maintenance Period shall be handed over /taken over by contractors engineer at respective site or mutually agreed with Railway.
- ii. During the maintenance period, the contractor shall be responsible to the extent expressed in this clause for any defects that may develop under the conditions provided for by the contract and under proper use, arising from faulty materials, design or workmanship in the plant, or from faulty execution of the work by the contractor but not otherwise and shall remedy such defects at his own cost when called upon to do so by the Purchaser Engineer who shall state in writing in what

respect the portion is faulty.

- iii. During the free maintenance period, contractor should stabilize the working of the system. Purchaser has the right to extend the period of supervision of the maintenance free of cost till the system stabilizes and works satisfactorily for a reasonable period of time. If during the time any equipment etc. is to be added or deficiencies are to be rectified to make the system work trouble free, the same also will have to be done by the contractor at no cost to Railway as to make good all the deficiencies. Major failure is defined as the total system down and minor failure is defined as system is working and part/ module of the system is failed. The Contractor's Engineer shall be responsible to identify the fault and advise corrective measures and ensure that defective cards are replenished.

b) Replacement services

In case of hardware failure, the replacement must be given in the next business day. If the bidder fails to replace as per below mentioned duration, the following penalties will be imposed as decided by Railways depending on the Circumstances:

If the Bidder fails to replace /Equipment card/Part in next business day, the following penalties will be imposed.

Equipment	Duration of repair	Deduction/Penalties
All Modules and accessories	More than 1 days and up to 7 days	1% of the cost of affected Equipment.
All Modules and accessories	More than 7 days and up to 15 days	5% of the cost of affected Equipment.
All Modules and accessories	More than 16 days and up to 60 days	25% of the cost of affected Equipment.
All Modules and accessories	More than 60 days	100% of the cost of affected Equipment.

Note:

- OEM should provide facility to Railway for direct fault case open on TAC Support in case of emergency.

The above replacement services will be applicable during maintenance supervision, and AMC

1. Appreciation Note

1. He is meticulous in executing field works as per standard practices.

2. He is prompt in his actions.

3. He consistently delivers quality work.

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Chapter -III

Scope of Work and Technical Specification

3.0 Scope and Description of Work:

Name of Work: Provision of Automatic Signaling system in Lottegollahalli - Hosur Section of Bengaluru Division.

The works to be executed can broadly be grouped as under:

- a) Provision of Automatic Signalling between **Lottegollahalli - Hosur section** covering 62 Rkm of Bengaluru Division, as per the tentative automatic signalling plans (attached).
- b) The scheme for the Automatic Signalling system shall be as per the Typical Circuits for Electronic Interlocking (EI) Version 3.0 for Automatic Signalling issued by Railway Board letter No. 2018/Sig/36-SD-1 dated 02.08.2024. The EI/OC-based Automatic Signalling shall conform to RDSO's standard typical circuits.
- c) Track Detection System – Design, supply, installation, integration, testing, and commissioning of a track detection system for Automatic Block Signalling using Multi Section Digital Axle Counters (MSDAC) with dual detection, as per RDSO Specification No. RDSO/SPN/176/2013 Version 3 with latest amendments, and STR No. SIQ 0001 Ver. 2.0 or latest.
- d) Integrated Power Supply (IPS) – Provision of IPS as per RDSO Specification No. RDSO/SPN/165/2023 Version 4.0 with Amendment 1 or latest.
- e) Design & Circuit Checking – Preparation of SIP & TOC, designing of interface and application logic circuits, and independent checking of interface and application logic circuits through IRSTO license holders.
- f) Automatic Fire Alarm & Detection System (AFADS) – Provision and networking of the Fire Alarm and Detection System to the S&T Control, as per RDSO/SPN/217/2025 Version 3.1 or latest.
- g) The work shall be executed in compliance with 25 kV RE standards.
- h) Removal of S&T Infringements – Shifting of signalling gears such as LC gates, location boxes, signals, cables, etc., and telecom gears such as cables, EC posts, etc., wherever required.
- i) As-Made Drawings – Submission of as-made drawings as per the extant practice of South Western Railway.
- j) The Electronic Interlocking systems shall be Kavach-ready and include provision for direct interface with TCAS, adopting a modular and scalable design to enable future upgrades and standardization across the section
- k) Synchronization with Ongoing Works and Existing EI System – This work shall be carried out in synchronization and be compatible with the existing and ongoing EI replacement work in the LOGH-HSRA section and Provision of Kavach works in LOGH-HSRA section.

Provision of Automatic Signalling between *Lottegollahalli - Hosur* section of Bengaluru Division.

- Number of Automatic Signals: 118 signals
- Number of MSDAC DPs: 360 Nos
- Number of Auto goomty: 8 Nos
- Number of Stations: 10 stations.

Name of Station	Type of Interlocking (Panel/RRI/EI)	Remarks
Hosur (HSRA)	Electronic Interlocking	M/s Kyosan
Maranayakanahalli (MNKH)	Electronic Interlocking	M/s Hitachi (New EI with distributed architecture of M/s. Kyosan make will be provided in due course)
Anekal (AEK)	Panel interlocking	EI Will be provided in due course (M/s Hitachi)
Helalige (HLE)	Electronic Interlocking	M/s Hitachi
Huskur Road (HKUR)	Electronic Interlocking	M/s Kyosan
Karmelaram (CRLM)	Panel interlocking	Present station provided with Panel Interlocking. Station will be converted to IBS.
Belandur Road (BLRR)	Panel interlocking	EI will be provided in due course (M/s Hitachi)
Baiyyapanahalli A panel (BPHI)	Panel interlocking	EI Will be provided in due course (M/s Hitachi)
Banaswadi (BAND)	Panel interlocking	EI Will be provided in due course (M/s Hitachi)
Hebbal (HEB)	Panel interlocking	EI Will be provided in due course (M/s Hitachi)
Lottegollahalli (LOGH)	Panel interlocking	EI Will be provided in due course (M/s Hitachi)

Auto Goomty locations between LOGH-HSRA section

Sl.No	Goomty No	Section/Station	Goomty Location (Km)	Side (Up/Dn)
1	Goomty No.1	HEB-BAND	KM 213/500	Dn side
2	Goomty No.2	BPHI-BLRR	KM 201/030	Dn Side
3	Goomty No.3	BLRR-HKUR	KM 192/770	Up side
4	Goomty No.4	HKUR-HLE	KM 185/645 at LC No.125	Up side
5	Goomty No.5	HLE-AEK	KM 180/015	Up side
6	Goomty No.6	HLE-AEK	KM 177/500 Near LC No.116	Dn side
7	Goomty No.7	AEK-MNKH	KM 169/650	Dn side
8	Goomty No.8	MNKH-HSRA	KM 161/340	Up side

2. RAILWAY SHALL PROVIDE THE FOLLOWING:

- a) Approval for Signal Interlocking Plan (SIP) and Table of Control (TOC).
- b) Approval to Equipment layout plan, Circuits and drawings other Construction drawings etc.which are not explicitly available in the Schedule of this work.

3. All QN1 and QNA1 24V DC, 8F/8B Relays, and any other relays that are required for

the work except those explicitly mentioned in the schedule. Inspection of S & T Equipment's and Works.

The Contractor shall be responsible for preparation, submission, and approval of various signalling engineering documents including Signal Interlocking Plans (SIP), Table of Control (TOC), Cable Route Plans (CRP), Cable Core Plans (CCP), Interface Circuits, Application Logic Circuits, and Station Working Rules (SWR). The scope also includes provision of proper earthing systems, lightning protection (Conventional Type-Franklin rod), fire alarm and detection systems, and associated telecom facilities such as emergency communication systems, and voice/data connectivity for control communication.

The indoor and outdoor signalling works are to be executed in a phased and coordinated manner to ensure minimal disruption to ongoing train operations. This requires detailed planning of execution strategies, phased commissioning, joint verification of systems, preparation of Non-Interlocking (NI) schedules, and adherence to safety and isolation protocols. The project holds strategic importance in improving the operational efficiency, throughput, safety, and reliability of train movements in this high-density corridor and will contribute towards modernization and standardization of interlocking infrastructure in the South Western Railway zone. All works shall be carried out strictly in compliance with Railway Board directives, RDSO specifications, and relevant technical instructions issued by the Zonal Railway.

Detail Description of Technical Guidelines:

All works under this tender shall be executed strictly in accordance with the *“Technical Guidelines for S&T Contractual Works”* issued by South Western Railway, enclosed as **Chapter 4B – Annexure**. These guidelines lay down the technical requirements, execution methodology, safety measures, quality standards, and compliance protocols to be followed during the execution of all Signalling and Telecommunication (S&T) works.

The technical guidelines provide detailed instructions regarding the supply, installation, testing, and commissioning of equipment and systems including Electronic Interlocking (EI), relay interlocking modifications, Muti Section Digital Axle Counters (MSDAC)/HASSDAC, power supply arrangements, outdoor signalling gears, indoor wiring, cable laying practices, earthing, telecom integration, and other associated works.

Contractors are required to adhere to these specifications and practices without deviation. Any departure from the guidelines shall require prior written approval from the competent Railway authority. The work shall be executed under the supervision of Railway engineers, with due emphasis on safety, reliability, system compatibility, and quality assurance, as stipulated in the said guidelines.

3.1 Multi Section Digital Axle Counter (MSDAC):

The proposed work includes the supply, design, installation, testing, and commissioning of Multi-Section Digital Axle Counter (MSDAC) systems between Lottegollahalli - Hosur Auto section.

The system shall conform to RDSO Specification No. RDSO/SPN/176/2013 Version 3 with latest amendments and STR No. SIQ 0001 Ver.2.0 or latest. The bidder shall design the complete scheme including the required number of evaluators, reset panels, axle detectors, detection points, trackside junction boxes, track clearance relays, line verification boxes, and status monitoring panels in line with the tentative Signal Interlocking Plans (SIPs).

MADAC Wiring and Installation shall be as per RDSO TAN No.STS/E/TAN/7010 dated 20.11.2024 or latest.
MSDAC reset shall be executed through soft reset using the Electronic Interlocking (EI) VDU system, in

accordance with SWR Policy No. SG/HQ/SWR/H/DRG POLICY dated 27.02.2025.

The system will consist of axle detectors, trackside electronics, central evaluators, reset units, relay interfaces, event loggers, diagnostic terminals, and all communication/interface devices necessary for field-to-evaluator connectivity. Built-in cable lengths of 5/10/15 meters with axle detectors will be supplied based on-site conditions.

Surge and lightning protection equipment, earthing (if required) and bonding as per RDSO/SPN/197/2008, and required Wago terminals, wiring materials, and DC-DC converters as per RDSO/SPN/165/2012 Version 3 are also part of the supply. The Earthing and surge protection shall be as per TAN on Earthing, Bonding, Surge and Lightning Protection System, No. STS/E/TAN/3006 Ver 3.1, dt. 25/06/2025.

Evaluators will be installed in relay rooms, while detection points will be placed across the yard as per approved SIP. Reset boxes shall include both a common reset panel with track status indications and individual reset facilities to be operated by Technicians in case of section failure as per SWR Reset Policy.

Diagnostic terminals shall be provided at both the station and test room, with suitable software for remote monitoring of all stations. All installation and maintenance tools as recommended by the OEM, along with two complete sets of technical manuals and troubleshooting guides, are to be supplied.

The contractor shall coordinate with other ongoing S&T works to ensure conflict-free execution and comply with Railway's instructions. Configuration and commissioning of MSDAC systems shall be performed by the OEM or their authorized representative only.

Railways will provide adequate space in relay rooms, 24V/110V DC supply to evaluators, six-quad cable between detection points and evaluators, and IP addresses for diagnostic terminals.

Any additional power supply or grounding requirement at field locations shall be arranged by the contractor. All required materials, even if omitted in the price breakup but essential for commissioning, shall be deemed to be within the scope and supplied at no extra cost.

Spares: Ten percent (minimum one number, rounded up) of indoor and outdoor hardware components are to be supplied as spares, excluding maintenance terminals and earthing kits. An OEM-certified breakup of all modules and hardware (e.g., cards, reset modules, LV boxes, detection points, relays, etc.) shall be submitted post-LOA for reference and validation.

Diagnostic terminal of MSDAC shall have monitor 21" or higher, CPU: Intel i7 or higher, RAM: 16 GB or higher of reputed make like DELL/HP/IBM/ACER etc, SSD hard drive.

NOTE: (a) The Auto section MSDAC system should be interfaced with existing MSDAC system at any of the station in Lottegollahalli - Hosur section.

(b) No additional cost will be paid for Interfacing Auto section MSDAC with existing station MSDAC system.

Functional Requirements of Networking of MSDAC:

1. All MSDAC evaluators shall be networked and shall be able to monitor from Divisional test room.
2. MSDAC Evaluators shall have unique addressing scheme for both main and redundant systems.
3. DP's shall have unique addressing scheme/identification as per approved SIP/Scheme plans. There shall be provision for Future DP's in the addressing scheme.
4. Section Lay out shall be shown in graphical manner in the diagnostic PC. Graphical User Interface shall be provided in the Diagnostic PC with customizable dash board.
5. It shall be possible to view entire block section or a particular track section as per selection or any combinations thereof.
6. Main and redundant track sections shall be shown with different colors in the yard layout provided for the diagnostic terminal.
7. It shall be possible to extract following exception reports track section wise, block section wise or any combinations there of
 - a. Number of soft resets initiated
 - b. Number of hard resets initiated
 - c. Number of supervisory resets initiated
 - d. Alarms generated in the evaluators
 - e. Event logs

Supervisory resetting data shall be visible supervisory section wise, block section wise and any combinations there of

8. Exceptional Reports for supervisory section wise, track section wise, main/redundant DP wise, block section wise or any combination thereof shall be generated.
9. Failure of Main/redundant DP shall be shown graphically with different color.
10. Parameters of individual DP's shall be visible through selection. If any parameter is out of limits, it shall be shown with orange/Red depending upon severity.
11. It shall be possible to monitor health of network devices through their PFC contacts.
12. It shall be possible to monitor whether the system is working on main or standby fiber.
13. It shall not be possible to configure the parameters of MSDAC Evaluators from Remote place
14. It shall be possible to access the network from anywhere on rail net with valid credentials
15. It shall not interfere with working of MSDAC system.
16. It shall be possible to access data from any number of terminals simultaneously.
17. The data shall be stored in a server with minimum back up of at least 3 months.
18. It shall be possible to calculate/arrive at MTBF of various components of MSDAC such as DP's, various cards, power supply, networking devices etc. automatically.
19. It shall be possible to generate SMS alerts to maintainers and supervisors when a failure occurs. These failures shall be configurable.
 - e.g: 1. If auto resetting is happening continuously for more than 3 times
 2. if supervisory reset is happening continuously for more than three times
 3. if OFC is cut in one path
 4. If one evaluator fails.
 5. If one power supply fails

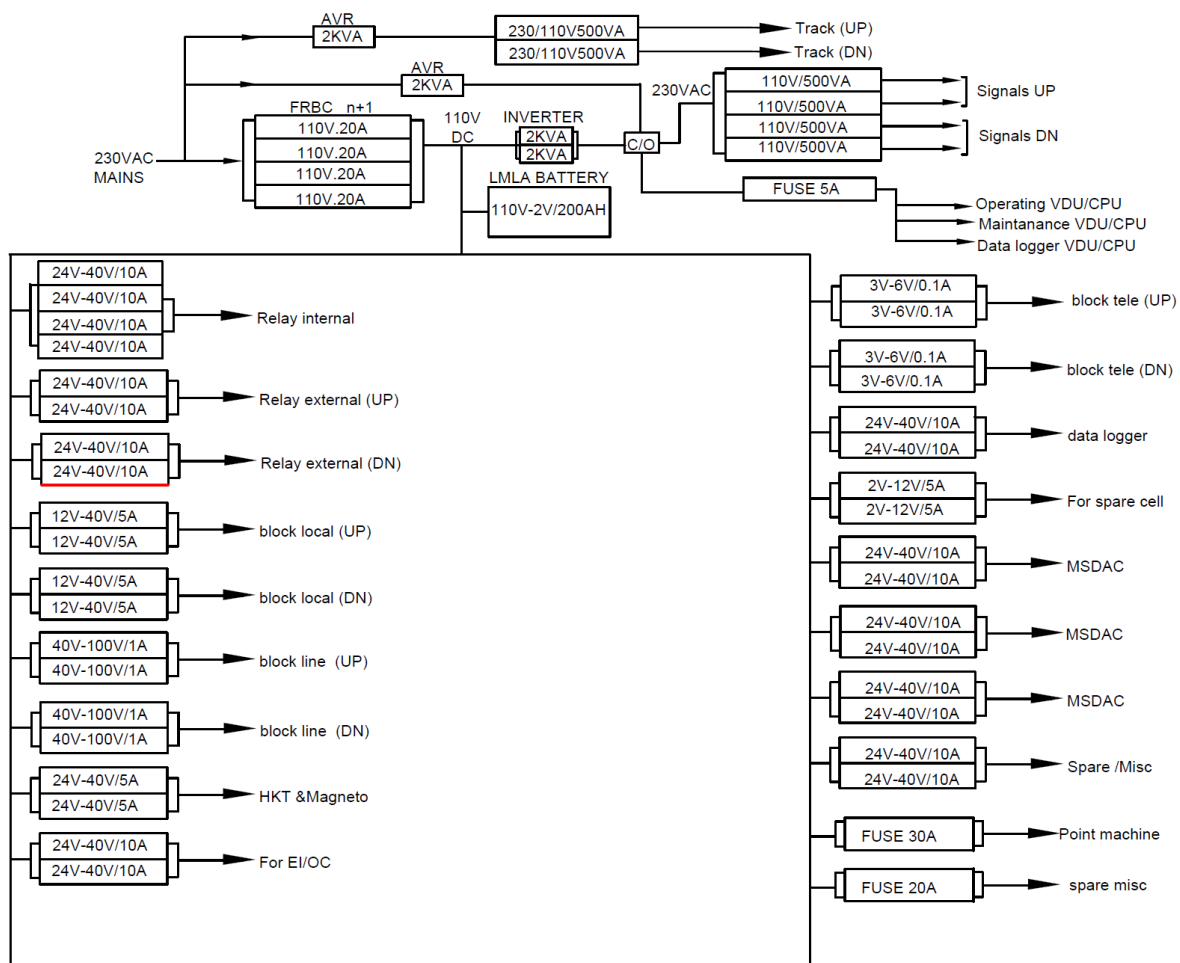
And any other failures as advised by Authority Engineer.

20. It shall be possible to generate exceptional reports about Hard resets.
21. Any configuration changes shall be able to be monitored with time and date stamps.
22. Age profile of equipment shall be mapped. It shall be possible to enter new details if a particular equipment/module is replaced.
23. A Pop-up window with audio/visual alarms shall be generated in case of the following catastrophic failures.
 - a) Any one of the evaluator
 - b) Any detection point
 - c) Any networking device.
24. It shall be possible to view the track occupancy status in the diagnostic PC of central control on real time basis. Latency shall be less than 2 Sec.
25. ACPRs, PPRs (Q Series Relays) shall be picked up at both entry and exit end DPs side for Proving in indication panels in ABS huts and stations.

Power Supply arrangements With IPS AB HUT In RE Area

RDSO/SPN/165/2023(Ver.4.0 or Latest)

Annexure A



LIST OF SPARES SUPPLIED WITH IPS

S N	SUB SYSTEM	SP COMPONENTS	QTY
1	SMPS CHARGER	MODULE (as cold stand by)	1 MODULE
2	INVERTER MODULE(2KVA)	MODULE (as cold stand by)	1 MODULE
3	DC - DC CONVERTER	DC-DC Converter for 1. 24V-40V/5A 2. 24V-40V/10A 3. 12V-40V/5A 4. 3V-6V/0.1A 5. 40V-100V/1A	1 MODULE Each
4	FERRO RESONANT TYPE AVR	AC Capacitor	1 set
5	FUSES	All types of fuses used in IPS sub system	1 set
6	TRANSFORMERS	MODULE (as cold stand by)	2 MODULE
7	INVERTER SMR	DC FAN	02 NOS
8	CELLS	2V CELLS	05 NOS
9	STATUS MONITORING PANEL		01 NOS

- NOTE: 1. One transformer spare wired SLOT to be provided in ACDP
 2. SMR shall be n+1 configuration, DC-DC converter for internal (n+3) configuration & for other circuit in n+1 configuration.
 3. There shall be 4 nos. wired spares SLOTS with 5A rating, 4nos. wired spare SLOTS with 10A rating DC-DC converter in DCDP (Spare SLOT shall be closed with cover plates).
 4. Total 2 status monitoring panel shall be supplied (1 spare +1 to be connect)

TYPICAL FUNCTION TABLE OF EI			
Sl. No.	Description of signaling Gears	EQUIVALENT FUNCTION	RELAYS
1	Signal Two aspect	3	HR, RECR, HECR
2	Signal Three aspect	5	HR, DR, RECR, HECR, DECR
3	Signal Four Aspect	7	HR, HHR, DR, RECR, HECR, HHECR, DECR
4	Junction route indicator - One way	2	UHR, UECR
5	Junction route indicator - Two way	3	HHR1, UHR2, UECR
6	Junction route indicator - Three way	4	UHR1, UHR2, UHR3, UECR
7	Junction route indicator - Four way	5	UHR1, UHR2, UHR3, UHR4, UECR
8	Calling on Signal	2	COHR, COECR
9	Shunt Signal (Dependent)	2	SHHR, SHECR (OFF)
10	Shunt Signal (Independent)	3	SHHR, SHECR (ON), SHECR (OFF)
11	Track Circuit	1	TR
12	Cross over Point (Signal ended/Double ended)	7	NWCR, RWCR, NDKR, RDKR, NDKR1, RDKR1 WJR, WCR.
13	L.C.Gate - Traffic	2	GZYR, GZPR
14	G.F.Operated Point	2	NDKR, RDKR
15	Block Instrument	4	TGT, TCF, LC, SNR
16	MSDAC Axle Counter with reset	6	VPR, VPR1, PPR /(LVR) , PPR1RSTR, RSPR
17	Crank Handle	2	CHZYR, CHZPR
18	Slot Outgoing	1	YR
19	Slot Incoming	1	YR
20	A Marker	2	AMGR, AMGECR
NOTE: 1.These are minimum vital input/output functions to achieve circuits in EI. In case typical circuit diagram of zonal railway have more vital inputs/outputs, it can be adopted and paid with the approval of CSTE/Project/SBC office after verification from HQ design office. Non-vital I/O and read back I/O shall not be counted. 2.If any new function/bit is required as per site requirement , approval of Engineer incharge to be obtained.			

Technical Specification			
S. No.	Item. No.	Explanation of Items	INSPECTION AGENCY
		GENERAL INSTRUCTIONS:	
		1) Current RDSO specifications are mentioned here. However, while procuring, only the LATEST RDSO SPECIFICATION will prevail and material to be inspected as per latest RDSO specifications, unless agreed by Railways for the previous specification available on tender closing date, if reasonable justification is submitted by contractor. Decision of Railways is final in this regard.	
		2) Quantity of all materials, to be procured in each spell, against each item will be decided by Railways based on the physical work progress/need and decision of Railways is final in this regard.	
		3) For materials with Consignee inspection, each item/material's sample/specification/make/model to be offered for Railway approval. The method of sample offering viz. catalogs/sample piece/spec/make/model/photo will be discussed. Only after Railway approval, procurement shall be made for permitted quantity. Railway will accept only the prior approved type of material and the quantity decided by Railway.	
		4) Materials shall be procured from the RDSO approved vendor list, prior approval of Railways shall be obtained before placing the order with vendors under Development orders.	
		5) Drawing number mentioned here are current and may be updated. Latest drawings are required to be followed while execution of work.	
		6) The quantities of sub items against each item are to be calculated/assessed and approval of Engineer to be taken before consolidated procurement of such items and for arranging inspection by RDSO/RITES, as indicated under Inspection Agency.0	
		7) The explanation mentioned for the schedule items below is to clarify further on the technical details about the schedule item. The items available in the schedule of this NIT shall be executed as per the explanation & Technical specifications given below.	
		8) The call letters for supply of materials shall be issued by the Engineer-in-Charge based on site requirements and the progress of physical work. The timing and quantity of such supply shall be at the sole discretion of the Engineer-in-Charge, and the same shall be final and binding on the contractor.	
		9) Change of Inspection Clause: if there is a need to change inspection to Consignee from RDSO/RITES, such change shall be authorized by CSTE/Projects/SBC, S.W. Railway.	

Schedule-A (SOR):			
1	101180	Supply of RCC cable markers as per drawing No. CSTE/CN/OFC/1. The lettering on the cable marker shall be "SIG" / "TELE" / "OFC" as per the instructions of Railway representative at site.	CONSIGNEE
2	101220	Supply of GI pipes – 50mm dia – 3.65mm thick as specified in Vol.II of the Tender document.	RITES
3	101230	Supply of GI pipes - 100mm dia -4.5mm thick as specified in Vol.II of the Tender document.	RITES
4	101240	Supply of GI pipes – 150mm dia – 4.8mm thick as specified in Vol.II of the Tender document.	RITES
5	102300	Supply and provision of Screening arrangement for Signals in RE area as per standard practice. The work comprises of providing MS angle frame and wire mesh in order to avoid close proximity of OHE wires. The work also includes provision of earthing wire using 4 SWG GI wires from the screening arrangement up to surface base as per the instructions of Railway representative at site. [All materials required for this work shall be supplied by the Contractor].	CONSIGNEE
6	102340	Provision of earth electrodes as per drawing No.SG/SN/02/13 and earthing of metallic sheath and armour of all cables in all apparatus cases, relay room, equipment room, SM's room for block and control, and earthing of all equipment in apparatus cases, power room, relay rack, cable termination rack, control panel, signals, lever frames with MS flat 35mm X 6mm/19c cable (MS flat for closer by areas and MS flat/19C cable combination for farther areas) as per the instructions of Railway representative at site. If required by Railways, end connectivity of MS flat to apparatus case, etc shall be by drilling two suitable holes on apparatus case both fastened with a set of suitable bolt with double nuts, two flat washers and one spring washer of G.I., as per the instructions of Railway representative at site. The work includes painting of earth resistance value on the earth pit. (Supply of 19C cable is not covered in the scope of this schedule). [MS flat for earthing 35mm X 6mm, cement, GI earth electrodes, common salt, charcoal, country bricks, river sand, soldering materials and all other miscellaneous materials required for the work shall be supplied by the Contractor].	CONSIGNEE

		Supply of MS FLAT 2 Mtr per Earth location shall be done as part of this item. Any requirement beyond 2 mtrs will be supplied by railways separately. (This shall be painted with black colour after one coating of red oxide)	
7	--	Supply of Colour light Signal pole 140mm dia, 4.6m/3.6m tall with necessary inspection.	-
8	102381	Supply of colour light Signal pole (4.6m) As per specification No.IRS:S-6/81 or latest.	CONSIGNEE
9	102382	Supply of colour light Signal pole (3.6m) As per specification No.IRS:S-6/81 or latest.	CONSIGNEE
10	102390	Supply of surface base to suit CLS Signal pole 140mm dia with necessary inspection as per as IRS(S) Drg.No.S- 2011/M.	CONSIGNEE
11	102400	Supply of ladder with platform and shoes to suit CLS pole 4.6m/3.6m tall, with necessary inspection.	-
12	102401	Supply of ladder with platform and shoes for 4.6m CLS pole as per RDSO Drg. No. SA-23153(Adv.)	CONSIGNEE
13	102402	Supply of ladder with platform and shoes for 3.6m CLS pole as per RDSO Drg.No.SA-23150(Adv.)	CONSIGNEE
14	102430	Supply of Colour Light Signal Multi Unit type - complete for 4/ 3/ 2 aspect with mounting socket, with necessary inspection.	--
15	102431	Supply of colour light Signal unit – 4 aspect as per RDSO Drg.No.SA-23001 – 23003A/M(Adv.) latest and IRS.S.26/64. The mounting socket should be provided for 140mm dia to RDSO Drg. No.SA-23005 A/M(Adv.) Latest	UTES
16	102440	Supply of Junction type route indicator – 5 unit arm – 1/ 2/ 3/ 4/ 5/ 6 way with mounting sockets, with necessary inspection.	
17	102441	Supply of Junction type route indicator – 1 way as per Drg.Nos.SA23401-23406 and IRS.66/84 complete with fittings, mounting sockets 140mm dia to RDSO Drg.No.S.23005/M(adv)& IRS-S-66/84 without lamps, lens & signal transformer. (Suitable arrangement should be provided to fix the Arm as per Unit Combination 'a' and 'b' indicated on the drawing)	UTES
18	102442	Supply of Junction type route indicator – 2 way as per Drg.Nos and IRS.66/84 complete with fittings,	UTES

		mounting sockets 140mm dia to RDSO Drg.& IRS-S-66/84 without lamps, lens & signal transformer. (Suitable arrangement should be provided to fix the Arm as per Unit Combination 'a' and 'b' indicated on the drawing)	
19	102443	Supply of Junction type route indicator – 3 way as per Drg.Nos. and IRS.66/84 complete with fittings, mounting sockets 140mm dia to RDSO Drg. & IRS-S-66/84 without lamps, lens & signal transformer. (Suitable arrangement should be provided to fix the Arm as per Unit Combination 'a' and 'b' indicated on the drawing)	UTES
20	102444	Supply of Junction type route indicator – 4 way as per Drg.Nos. and IRS.66/84 complete with fittings, mounting sockets 140mm dia to RDSO Drg. & IRS-S-66/84 without lamps, lens & signal transformer. (Suitable arrangement should be provided to fix the Arm as per Unit Combination 'a' and 'b' indicated on the drawing)	UTES
21	102450	Supply of Calling On Signal / 'A' marker light – complete with necessary inspection.	UTES
22	102451	Supply of Calling On Signal as per As per Drg enclosed.	UTES
23	102452	Supply of 'A' marker light	UTES
24	102460	Supply of Off-set brackets - large/ small made of cast iron with necessary inspection.	--
25	102461	Supply of Off-set bracket (large) as per Drg No. SA-23080/M with 'U' bolts and nuts for 140 mm CLS Post.	UTES
26	102462	Supply of Off-set bracket (small) as per Drg No. SA-23080/M with 'U' bolts and nuts for 140 mm CLS Post.	UTES
27	102470	Supply of cable termination box (FRP type) with necessary inspection as per specification/drawing /description enclosed in this document.	CONSIGNEE
28	102490	Supply of PBT terminals 25mm/ 60mm centre and PBT Fuse blocks with necessary inspection.	--
29	102491	Supply of PBT terminals 25mm centre.	RDSO

30	102492	Supply of PBT terminal – 60mm centre	RDSO
31	102493	Supply of PBT fuse block (without ND fuse)	RDSO
32	102510	Supply of apparatus cases (full/ half/ quarter size) to suit Southern Railway standard with necessary inspection.	-
33	102511	Supply of apparatus case – Full size	MITES
34	102512	Supply of apparatus case – Half size	MITES
35	102570	Supply of Electric key transmitter – rotary type of required ward Nos. with keys, with necessary inspection as per Spec. No.IRS:S-21/01 & Drg.No.SA-22601. (Alt.4).	RDSO
36	102590	Supply of A type foundation made of cast iron as per Drg No.CWM.00902 and as per specification /drawing/description enclosed in this document, with necessary inspection.	CONSIGNEE
37	103360	Supply and provision of Rubber mat of not less than 6mm thick and with an insulation to withstand 650VAC, on the floor of relay room etc at places as indicated by railway representative at site.	CONSIGNEE
39	104090	Design, fabrication and supply of Gate Indication Panel of 16 SWG, powder coated MS sheet of size 450mm x 300mm x 100mm approximately consisting of different colour LEDs with holders suitable to work on 24VDC supply. Indications on the front panel shall be as per typical diagram supplied by Railways. All descriptions on the front panel have to be neatly painted. The Panel shall then be wired using wire PVC 16/0.2mm copper as per the approved circuit diagram and installed in the gate lodge as instructed by Railway representative at site. [All materials required for the work shall be supplied by the Contractor].	CONSIGNEE
40	104120	Supply and installation of teak wood glass fronted box of size 300mm x 600mm x 75mm with hooks to keep various keys with description engraved on the tags. [TW Glass fronted box of size 300mmx600mmx 75mm with built in lock, hooks, engraved tags and all other miscellaneous materials required for the work shall be supplied by the Contractor].	CONSIGNEE
41	104240	Supply and installation of yard layout diagram board in the station master's room. The board shall be made of Phynolic synthetic industrial fibre base fine weave cotton fibre board (matt finish) 6mm thick size 1800mm X 1200mm with aluminium channel frame OR flexi-print fixed/pasted	CONSIGNEE

		on suitable frame of minimum 6mm thickness, as per site requirement and as per instructions of Railway representative at site. The yard layout shall be neatly painted and fixed as instructed by Railway representative at site. [All materials required for the work shall be supplied by the Contractor].	
42	104260	Supply of 2 pin socket – 5A with switch, fixing the same on the hardwood plank available and extending the 110vAC using wire PVC 3/0.75mm copper, in all the apparatus cases, as per the instructions of Railway representative at site (2 pin socket – 5A with switch, wire PVC 3/0.75mm copper and all other miscellaneous materials required for the work shall be supplied by the Contractor).	CONSIGNEE

Schedule-B (Supply)			
1	1	Cable termination racks size 880mm X 2 Meters made out of 50mm X 50mm X 6mm thick MS angle POWDER COATED with stainless steel nuts and bolts for fixing the racks with suitable holes for hylem sheet complete as per standard practice with tripod bases and reel insulators. Cable ladder of 400mm x 2000mm be provided at both sides with angle size 40mmx4mmx5mm with supporting plate of size 25mmx5mm. (Colour shall be of siemens grey or as per Railways).	CONSIGNEE
2	2	ARA Terminal block 6way, 25mm centre made up PBT as per RDSO Drg No.SA.23756/Adv/Alt.3, confirming to specification No.IRS.S75/2006(Rev.2) or latest.	RDSO
3	3	High Density Polyethylene Pipes (HDPE) of 110 mm Outer Dia, 10 mm Wall Thickness, along with one coupler for every 6 Meters as per specification IS 4984: 2016 with latest amendments and material Grade: PE 80 (Required lengths of pieces will be decided by Railways).	UTES
4	4	Basic material to construct Unit Maintenance Free Earth as per RDSO Spec No. RDSO/ SPN/197 ver 1.0 or latest. This shall consist of Supply of MAINTENANCE FREE EARTHING AND BONDING SYSTEM as per RDSO specification no: RDSO/SPN/197 ver 1.0 or latest RDSO specification consisting of (a) Copper bonded steel earth electrode min 3.0 mtr long & min 17 mm dia – 1 No. (b) RDSO approved Earth Enhancing compound 30-35 kg. (c) (MEEB) Main equipotential earth busbar of Copper of 300x25x6 mm (Min)-1 no. and Cu busbar of copper 200x25x6 mm (Min). -1 no.s (d) Inspection chamber 300x300x300 (Inside dimension) of RCC with 50 mm thick and fine finish	RDSO

		(e) 400 mm x 400 mm concrete lid cover 95pprox.. 50 mm thick with pulling hook. (f) PVC insulated multistrand 35 Sqmm Cu cable as per IS: 694 – 10 mtrs (g) In case of Ring Earth arrangement, MEEB busbar of Copper of 450x50x6 mm – min.-1 No. and (h) RDSO approved Earth Enhancing compound required for interconnecting portion to be supplied by contractor as per RDSO/TAN/3006, Ver.3.1 dated 30-06-2025, as per site requirement.	
5	5	Supply of 50x6mm GI Tape for interconnecting earth electrodes	CONSIGNEE
6	6	35 Sq.mm. Multi-strand Single Core PVC insulated Copper Cable as per IS:694 of reputed make for connecting Main Earth Electrode to MEEB in the equipment room. Colour: Green (This item shall not be operated for EI schedule).	CONSIGNEE
7	7	16 Sq.mm. Multi-strand Single Core PVC insulated Copper Cable as per IS: 694 of reputed make for connecting MEEB to SEEB and SPDs to MEEB. Colour: Green (This item shall not be operated for EI schedule).	CONSIGNEE
8	8	10 Sq.mm. Multi-strand Single Core PVC insulated Copper Cable as per IS: 694 of reputed make for connecting SEEB to all equipment. Colour: Green (This item shall not be operated for EI schedule).	CONSIGNEE
9	9	Conventional lightening protection system consisting of Franklin rod of 16mm dia, single prong spike made of copper of length 600mm. Appropriate reducer/coupler for connecting Franklin rod and GI mast, GI mast approximately 1.5 inch dia, 10-12 mtr length with flanges for installation of franklin rod with all supporting accessories, such as guy rope, U-bolt, thimble, adjustable clamp, D-shackle, hook, concrete foundation materials, etc. As per RDSO TAN on Earthing, Bonding, Surge and Lightning Protection System, STS/E/TAN/3006 Ver 3.1 or latest, dt 25.06.2025. (Supply of 50 sq mm copper bonded steel conductor is not covered in this schedule item).	CONSIGNEE
10	10	Earth Leakage detector 12 channel (4 Channels- 110V AC, 2 Channels- 110V DC, 6 Channels- 24V DC, with necessary fuses and fuse box arrangement) as per RDSO Spec./256/2002 or latest with 6-digit counter.	RDSO
11	11	Steel Almirah (Model: Godrej Store well/slimline 4S) of size min.72 x 36 x 18 inches (HxWxD)	CONSIGNEE
12	12	Foldable Step ladder Aluminum made of BATHLA make or better, of Approx. 5 feet height, min. with front 5 steps, load capacity-150Kg, platform included.	CONSIGNEE
13	13	Flex printing with Sun board fixing of various drawing with Colour (Power board diagram, Relay index chart, Station Rule Diagram, FTOT Particulars, etc), as per instructions of Site In-Charge Railway	CONSIGNEE

		Representative.	
14	14	Printed and bounded registers including maintenance registers for MSDAC, point machine, track circuit etc. (100 Pages each of 75 gsm paper). This includes: Relay Room key register, Route cancellation register, Crank handle register, Signal failure register, Diesel consumption register (Wherever applicable), Block key register, Signal history register, Calling-on initiation/ Cancellation register, Track circuit/MSDAC maintenance register, Signal LED maintenance register, IPS/battery maintenance register, Generator repair register (wherever applicable), Block joint/glued joint maintenance register (wherever applicable, cable megger register, infringement register, earth resistance measurement register as instructed by Railway supervisor in-charge at site.	CONSIGNEE
15	15	Supply of Fencing Uprights (SCR OHE SOR-30 (a) (i))	CONSIGNEE
16	16	Supply of Fencing Panels (SCR OHE SOR-30 (a) (i))	CONSIGNEE
17	17	Permanently Lubricated High Density Polyethylene Duct (PLB-HDPE), 40/33 mm Dia, along with End Cap, End Plug, Cable Sealing Plug and Couplers, as per RDSO/SPN/TC/45/2013 Rev.2 (upto Amdt.2) or latest. Colour of HDPE to be as per Railway requirement.	MITES
18	18	Supply of Joint kit conforming to RDSO specification No. IRS-TC 77/2006 Revision1 or latest for quad cable.	RDSO
Schedule-B1 (Supply)			
1	1	Supply of Hylam sheet resin bonded 10mm thick of size 2400mmx1200mm.	CONSIGNEE
2	2	Supply of Universal Lock.	CONSIGNEE
3	3	Supply of 200 Way Tag block.	CONSIGNEE
4	4	Supply of Navtal Godrej make brass lock 50 mm with min 3 keys.	CONSIGNEE
5	5	Supply of Piezo electric Buzzers 24 V of different tone to be approved by Supervisor incharge of work.	CONSIGNEE
6	6	Supply of toolkit for ESM as recommended by CSTE technical instructions consisting of 15 items including tool box as per the list enclosed.	CONSIGNEE

7	7	Supply of crimping tool 25 Sq mm. of reputed make.	CONSIGNEE
8	8	Supply of Rodometer (Distance Recorder) similar to Bosch make Model No.1011662 or better.	CONSIGNEE
9	9	Supply of laser-based Distance Reader similar to Bosch make Model No.GLM 100c laser range finder or better with blue tooth and all accessories.	CONSIGNEE
10	10	Supply of Digital AC/DC clamp meter capable of measuring low currents in Ma range as well as high current upto 60A in AC and DC similar to model No.211B of Stanley make or better. (Inspection by Consignee).	CONSIGNEE
11	11	Supply of Signal aspects – LED Red with current regulator for the following types, with necessary inspection as per specification RDSO/SPN/199/2010 revision 1.1 or latest.	RDSO
12	12	Supply of Signal aspects – LED Yellow with current regulator for the following types, with necessary inspection as per specification RDSO/SPN/199/2010 revision 1.1 or latest	RDSO
13	13	Supply of Signal aspects – LED Green with current regulator for the following types, with necessary inspection as per specification RDSO/SPN/199/2010 revision 1.1 or latest.	RDSO
14	14	Route-Colour light signal LED signal lighting unit for railway signaling as per RDSO spec RDSO/SPN/153/2023 Rev 5.0 or latest.	RDSO
15	15	Calling on-Colour light signal LED signal lighting unit for railway signaling as per RDSO spec RDSO/SPN/153/2023 Rev 5.0 or latest.	RDSO
16	16	Shunt-Colour light signal LED signal lighting unit for railway signaling as per RDSO spec RDSO/SPN/153/2023 Rev 5.0 or latest.	RDSO
17	17	Supply of LED aspect for 'A' marker lit aspect LED.	
18	18	Relay, Non-AC immune, plug in type, style QN1, Neutral line 24 V DC 8F/8B contacts, front & back contacts metal to carbon, complete with plug board retaining clip & connectors confirming to BRS:930, IRS:S-23/88 (Amdt 1) & IRS:S-34/68 (upto Amdt 6) or latest. The interlocking code for this unit shall be ABCDF	RDSO
19	19	Relay, AC immune, plug in type, style QNA1, Neutral line 24 V DC 8F/8B contacts, front & back contacts metal to carbon, complete with plug board retaining clip & connectors confirming to BRS:931A, IRS:S-23/88 (Amdt 1), IRS:S-34/68 (upto Amdt 6) & IRS:S-60/78 (Amdt 1) or latest. The interlocking code for this unit shall be ABDGH.	RDSO

20	20	Universal plug in type Q style (ECX-61) AC LED lamp proving relay within built current transformer type, slow release, neutral line relay, 4F/4B front and back metal to carbon contacts suitable for work in series with 110v ac, led signal lamp 15w conforming to RDSO spec., STS/E/Relays/AC Lit LED signal/09/2002 amdt-1, BRS-941a, IRS.S.34 & IRS.S.23 interlocking code shall be ABDHK.	RDSO
21	21	Supply of Office table of Godrej T8 or of reputed make, as per Railway Representative, for keeping circuits/carrying office work.	Consignee
22	22	Supply of Office/ visitor/ study/ executive/ computer support Chairs (Cushioned) of Godrej or reputed firm for seating arrangement as per railway representative instructions.	Consignee
23	23	Supply of RFID marker locator SML model or similar, 8000 or more marker records, Built in GPS module, 1.5m Depth Range with LCD display Cable marker Locator.	Consignee
24	24	Supply and installation of smart RFID marker, SML 1014 model or similar-Telephone based Electronic Cable marker 2.5 cm dia, minimum 1.5m depth range and with Hexadecimal ID code as per railway representative instructions.	Consignee
25	25	Supply of commercial/industrial grade operator VDU of sizes 55" Full HD, HDMI/DVI connectivity, in built speaker etc (For this item prior approval of engineer in charge is required in written).	UTES
26	26	Supply of fan less industrial grade embedded PC with all accessories such as key board, mouse, Antivirus etc of industrial grade Embedded Moxa V2406A-C& or VECOW ECS 9210M or similar Ref: RDSO TAN: STS/TAN/3012 version 2.0 as per technical specification or latest) SPECIFICATION CPU: Quad core Intel Xeon/Core i7 processor (Kaby Lake-S/Skylake-S) or better RAM : 16 GB or higher Storage: (SSD): 480 GB SSD or higher Audio: Line-in, Line-Out Interface Operating System :Windows 10 IoT Enterprise 2016 LTSB – 64 bit. LAN 2 Giga Bit Ethernet Port with M12 X- Cord connector. Graphic Controller : Inter HD Graphic P630 or better Key board and Mouse reputed make and model.	UTES

27	27	FRP Road warning signal unit	Consignee
28	28	Electronic Timer 60Sec	RDSO
29	29	Electronic Timer 120Sec	RDSO
30	30	Supply of Wago terminal of 2-conductor disconnecting terminal block for 2.5 sq mm wire termination. Make: Wago/Elemex or similar with all accessories and taxes.	RDSO
31	31	FLEXIBLE COVER 180MM WIDTH	Consignee
32	32	PLASTIC TRUNKING 195X50MM	Consignee
33	33	FLEXIBLE COVER 85MM WIDTH	Consignee
34	34	PLASTIC TRUNKING 105X50MM	Consignee
35	35	Supply of data logger 512 digital inputs and 32 analog inputs for remote monitoring with network as per RDSO spec No.IRS.S99/2006 (Amd-2) or latest. This includes supply of EI modem, power supply arrangement for data logger consists of 12V, 42AH VRLA batteries-4 Nos and 10A charger 1 No and fault diagnostic software along with computer-printer, table and operator chair. The computer table shall of reputed make such as Godrej/Damro or better) with rectangular top of minimum 1.4 mtrs length, 0.8 mtr width and 0.7 mtr height with suitable shelves and draws., as instructed by Railway Supervisor In-charge at site., The operator chair shall be of reputed make such as Godrej/ Damro or better with revolving type, adjustable hand rests, wheeled, with cushion seat and backrest, with suitable height adjustment, as per instructions of Railway supervisor In-charge at site. Datalogger Data Analyser with laser jet printer of HP LASERJET M208dw / BROTHER HL-L2366 DW or better (Specification of Data Analyser: All in one PC with intel core i7, 512GB SSD, preloaded with Windows 11 Home edition or better, 21" display and 16 GB/above RAM or better). In case of EI installation, this data logger is for logging events outside of EI and full digital input must be supplied. Interface connection with EI is part of EI. The data logger will transfer its own data along with EI data to central monitoring unit by using EI connectivity. Supply of Interconnecting cable between Contacts and Data logger – this can be either 60/40 indoor cable or jumper wires as per IRS:S-76/89 or latest RDSO specification as per requirement.	RDSO
36	36	Supply of Multi port Front End Processor as per RDSO spec No: IRS:S: 99/2006 (Amendt.3) or latest (Inspection: RDSO)	RDSO

37	37	Supply of Central Monitoring Unit (CMU) as per RDSO spec No: IRS:S:99/2006 (Amendt.3) or latest as per Specification A1 (Inspection: RDSO).	RDSO
38	38	Supply of Dual port E1 to RS232 Converter card (Inspection: Consignee)	CONSIGNEE
39	39	Supply of USB to RS232 converter (Inspection: Consignee)	CONSIGNEE
40	40	Supply of Multi Monitor software along with yard digitalization for Auto Hut Location. (Inspection: Consignee)	CONSIGNEE
41	41	Supply of 85-inch LED monitors Make: Samsung or similar. (Inspection: Consignee)	CONSIGNEE
42	42	Supply of 24-32v/10A DC-DC Convertor module IPS with RDSO Spec. No. RDSO/SPN/165/2012 ver:3.0 (Make shall be decided by Railway representative. Accepted make: Statcon/ HBL/Amararaja)	RDSO
Schedule-C (Execution)			
1	021010	Erection of CT Rack with scaffolding suitably concreting tripod bases and reel insulators with "J" bolts and nuts. Tripod and other supporting are to be painted in 2 coats with enamel. The work shall be done as per approved plan, extent practice on Rly. and the instructions of Railway Engineer at site.	CONSIGNEE
2	021030	Track crossing by Horizontal Boring Method based on RDSO Report No. BS - 105. This also includes insertion of HDPE Pipe of 110mm Outer dia in the Bore drilled. (Supply of HDPE Pipe is not included). The depth of cable duct/drill shall be at minimum 1.2-meter depth from bottom of the sleeper by trench less boring method. Based on site conditions, Heavy Duty Machine shall be deployed wherever required as part of this item. Measurement will be done as per actual track crossing but not based on the Payment will be given as per actual span of boring but not based on the length of pipe used. The residual portion of pipe shall be buried by trenching.	CONSIGNEE
3	021040	Termination of main, tail, Signalling and power cables and internal wiring on terminal/ fuse blocks in cable termination Rack at relay room. The work includes fixing of all new cables by teakwood clamp on teakwood base plank, fixing of Hylam sheet 10mm thick for terminal board, varnishing all teakwood items, fixing of terminals/ fuse blocks on the terminal board, drilling of necessary holes, termination of cables, wiring, identification of cables using aluminium tags with letters punched neatly, as per approved circuit diagram	CONSIGNEE

		and cable plan, painting of particulars on sleeves. After terminations are over, cable entry at the bottom shall be closed with, cement plastered, the inter-space filled with river sand up to base level and the bottom surface shall be sealed with sealing compound. Cable armour to be soldered to earth. (Supply of cable termination racks is not included in this schedule). All bolts and nuts with washers, cement, sand, stone jelly, teak wood base, hylam sheet, paints and all other miscellaneous materials required for the work shall be supplied by the contractor] (a) Termination on 25/60mm PBT terminals	
4	021060	Provision of 2 machine cut grooves in parallel at a separation of 8 cm each to a depth of 150 mm in the platform surfaced/tiled floor for laying cable and resurfacing it.	CONSIGNEE
5	021070	Laying of HDPE pipe 110 mm Thickness, 10 mm dia along with collars in trenches at places of platform cutting etc., and wherever required as per the instructions of site engineer	CONSIGNEE
6	021080	Concreting of cable laid in the trench or GI pipe/DWC/HDPE pipe in which cable is already laid to a size of 300*300mm with 1:3:6 mortar. (All the materials required for the work should be supplied by the contractor, supply of DWC/HDPE pipe is not covered in this schedule)	CONSIGNEE
7	021100	Installation of Unit Maintenance Free Earth Pit as per RDSO specification No. RDSO/ SPN/197/ 2008 or latest and as per Technical Specification. This includes Construction of earth pit and making of earth as per RDSO specification no. RDSO/SPN/197 or latest. RDSO specification and drawing no: SDO/RDSO/E&B/001, Equipotential Earth bus bar and its connection to equipment and surge protection devices in the equipment room as per RDSO Drg. no. SDO/RDSO/E&B/002 wherever applicable. Provision of Exothermic weld connections, insulators, bolts & nuts, fixtures for mounting the Copper tape in the relay room, weld materials, tools & fixtures for the weld shall be arranged by the contractor. At certain locations, it may not be possible to achieve earth resistance of <1 ohm with one earth electrode/pit due to higher soil resistivity in such cases provision of loop earth consisting of more than one earth pit to be done. Note: as per IS 3043 Code of practice for earthing, The interconnecting tape shall be buried at depth not less than 500mm below the ground level. This interconnecting tape shall also be covered with earth enhancing compound. For Ring Earth or any other place where two earth pits are being interconnected, required earth enhancing compound material shall be supplied as part of this item by the contractor. The earth resistance shall be measured at the main equipotential bus bar (MEEB) with all the earth pits	CONSIGNEE, Earth Enhancement material by RDSO.

		interconnected using fall of potential method as per para 37 of IS:3043. The 25 x 2copper strip or 8mm round solid copper or 50x6 mm GI Tape interconnecting the earth electrode shall be buried at a depth not less than 500mm below ground level and this copper strip/GI Tape should also be covered with earth enhancement compound. Necessary earth enhancement compound for Earthing and Bonding Scheme for EI, STS/E/TAN/3006 ver 3.1 dtd 30.06.2025, shall be supplied by contractor (Supply of 25x2 copper strip or 8 mm rod or GI Tape is not covered in this scope of schedule).	
8	021120	Installation of conventional lightening protection system consisting of Franklin rod, appropriate reducer/coupler, flanges and GI mast with all supporting accessories such as guy rope (6 mm GI wire), U-bolt ,thimble, adjustable clamp, D-shackle, hook, and necessary concrete foundation etc. This shall include all the misc. material required for installation of the class A lightening arrestor which shall be installed at a height more than height of VHF antenna. The down conductor/ earth bonds/ Cables/ Wires shall be connected to the earth using the shortest possible path. Preferably, Isolated Spark Gap (ISG) of rating 100 KA shall be used to interconnect lightning arrestor earth pit to signal ring earth as per RDSO TAN on Earthing, Bonding, Surge and Lightning Protection System, STS/E/TAN/3006 Ver 3.1 or latest, dtd 30.06.2025.	CONSIGNEE
9	021140	Installation, Testing/commissioning of Earth Leakage Detector 12 channel. This work includes Data logger potential free contacts wiring to be done and necessary miscellaneous items to be supplied by contractor as per instructions of Railway Supervisor at site.	CONSIGNEE
10	021200	Strengthening of foundations of signals, Full/Half location boxes, by carrying out the earth work around the foundation, ramming of the earth, carrying out masonry work from bottom of earth work using country stones and cement masonry to prevent the earth from slipping down the bank.	CONSIGNEE
11	021210	Erection of Fencing Uprights (SCR OHE SOR-30 (a) (i))	CONSIGNEE
12	021220	Erection of Fencing Panels (SCR OHE SOR-30 (a) (i))	CONSIGNEE
13	021260	Provision of normal joint of Heat Shrinkable type complete for 6 quad cable. After the jointing the through cable has to be tested for insulation resistance and loop resistance in presents of Railway Engineer and in case of any defects the jointing has to be done at free of cost by the contractor.	CONSIGNEE

		[Heat Shrinkable jointing kit conforming to RDSO specification No. IRS-TC 77/2006 covered in the supply portion has to be used for this purpose. The Contractor should supply Jointing compound & all other small items free of cost which are required for making a joint. Only gas blower to be used for blowing].	
14	021290	Provision of security Guards round the clock in 12 hours shift beat from Up Home signal to Down home signal to avoid theft of Signalling assets. This item shall be operated only if specifically required by the Railways and only after the issuance of a Provisional Acceptance Certificate (PAC).	CONSIGNEE
Schedule-C1 (Execution)			
1	1	Laying of HDPE duct in already made trench in all type of soils and through existing RCC cable duct/GI/RCCpipes. Proper couplers have to be provided for blowing OFC.	CONSIGNEE
2	2	Blowing of OFC cable in HDPE/DWC in duct by using blowing machine and other associated works and as directed by Railway Engineer.	CONSIGNEE
3	3	Leading in arrangement for OFC cable inside service building by providing large G.I. Bend at bottom & vertical G.I Pipe of 75 mm dia. The vertical pipe shall be taken 75 mm above the floor level & the mouth of the pipe shall be covered by Plastic Cap. The floor shall be restored to the original condition.	CONSIGNEE
4	4	Fixing of 6-way PBT terminal blocks and termination of cable on each terminal. Payment will be done per no .of cable terminations. After terminations are over, the side openings of apparatus case foundation shall be closed with brick work, cement plastered, the inter-space filled with river sand up to base level and the bottom surface shall be sealed with sealing compound. (Supply of PBT terminals and Fuse blocks is not covered in this schedule). [Cement, teakwood cable clamp 50mm x 50mm, base planks 100mm x 25mm, Phynolic synthetic industrial fibre base fine weave cotton fibre sheet - 6mm thick to IS specification 2036 - 1995 - Type F5, PVC/Nylon sleeves, varnish, paints, bolts, nuts and washers, Non- deteriorating type of fuses of various capacities, Aluminium cable tags, sealing compound (such as Bituman compound) country bricks 220mm x 100mm x 60mm, copper bus bars, brass screw, river sand, wire PVC3/0.75mm copper and other miscellaneous materials shall be supplied by the Contractor].	CONSIGNEE
5	5	Installation ,wiring , testing and commissioning of data logger 512 digital & 32 analog inputs. This includes installation, wiring, testing, commissioning and networking with existing NMDL system at test room inclding necessary modification in the database, complete along with contractor own material. This also includes programming of data logger for fault diagnostic in suitable structured language in consultation with railway. Required potential free contacts will be provided in the Relay rooms	CONSIGNEE
6	6	Testing and Commissioning of Multi port Front End Processor.	CONSIGNEE
7	7	Testing and Commissioning of Central Monitoring Unit (CMU).	CONSIGNEE

8	8	Testing and Commissioning of Dual port E1 to RS232 Converter card.	CONSIGNEE
9	9	Testing and Commissioning of Multi Monitor software.	CONSIGNEE
10	10	Testing and Commissioning of 85-inch LED monitor.	CONSIGNEE
11	11	Carefully opening the bunching inside the relay room as instructed, removing the relay pin along with the wire, neatly and carefully removing the wire duly testing with buzzer, re-bunching & placing with modi nylon/twine threads and PVC dotted with buttons where required.	CONSIGNEE
12	12	Digging of cable trench to a depth of not less than 30cm in rocky terrain, concreting the trench with 150mm thick concrete in the ratio 1:2:4 and after proper curing, back filling with excavated soil.	CONSIGNEE
13	13	Video recording of cable trench using minimum 720P and above HD camera and submit one copy in New removable hard disks (With capacity as per requirement) and two copies in Pendrive.	CONSIGNEE
14	14	Transportation of light materials/men with tools, documents from central location to the work spot and back.	CONSIGNEE
15	15	UG Cable route tracing service using Radio detection make Advanced Cable & Pipe Locator equipment at SWR, Bengaluru projects division (work to be carried out between Lottegollahalli and Hosur stations of SWR SBC division). - Equipment model to be used for UG Cable route tracing service Radio detection make RD8100 PDLG or RD8200G. - Report in the form of KML file (soft copy) to be submitted to Customer within 30 days from the date of work completion at site.	CONSIGNEE
16	16	Provision of Lighting arrangement for NI working at both side Goomty and Point locations. Table fan, Adequate tube lights for goomty, and point locations shall be provided by contractor.	CONSIGNEE
17	17	Cable armors soldering and earthing as instructed by incharge SSE/JE at site.	CONSIGNEE

Schedule-D (Supply & Installation)			
1	1	Supply and fixing of retro-reflective type Calling-On/STOP/BSLB/Legend boards as per practice & SEM (Angle/Rail is to be supplied by Railway).	Consignee
2	2	Supply and Fixing of Normal/Emergency Key Box at Interlocked LC Gates, made of Teak wood with Glass fronted door as per drawing 03/91. Polishing on all exposed surface and for with EKT inside the box. Micro push switch of L&T make with 2NO+2NC contacts and veeder counter non-reset type and wire them as per the approved circuit diagram. The box should have hinges and pad locking arrangements with one No.40 mm Navtal-Lock with duplicate keys and key chain with label. (All materials except EKT are to be supplied by the contractor).	Consignee
3	3	Supply and placing of polyolefin cable channel of size width 240/340mm, height 155/230 internal/external length 1mtr produced of polyolefin with fire protection class k-1 in accordance with DIN 53438 part-II for laying signalling/telecom cables channel attachable to each other with male-female swallow tail connectors and having suitable detachable cover.	BITES
4	4	Supply and Placing of Trunking and Capping (RCC Duct) of 500mm Width as per Drg. No. SDO/Cable laying/007 (Annexure-10), as detailed in document No. RDSO/SI/G/2010 Ver.1.1 or latest on 'Guidelines on signaling cable laying'.	BITES
5	5	Supply and Fixing of PVC casing and capping/PVC pipe of minimum 25 mm size or higher as per requirement at site on the wall/floor etc., using bends, coupler and T joints and flexible pipe wherever necessary with fixture in the OFC room from equipment rack to common termination and from OFC room to SM room/Reservation office /Data logger/FOIS room etc. (All required material for fixing to be arranged by the contractor).	Consignee

Schedule-D1 (Supply & Installation)			
1	1	Supply, Installation, testing and commissioning of SMPS based Integrated Power Supply (IPS) for LC gates in RE area confirming to RDSO Specification No. RDSO/SPN/165/ 2023, Version 4.0 Amdt.1 or latest with STR No:-SIQ 0110 Ver. 3.0 or latest along with status monitoring panel as per Drawing No. B/SG/Proj/BNC/IPS/LC. enclosed as Annexure A and Annexure B. IPS should be supplied with (55+5= 60 Nos. of VRLA Battery 2V-200AH as one set for one IPS confirming to RDSO Specification No: IRS: S-93/96(A) (Amd. 1) (To be used with IPS in 25 KV RE area for signalling application As per Railway Board letter No. 2010/SIG/SGF/2/VRLA Battery Dt. 20.12.10)STR No:- SIQ 0113 Ver. 1.0 along with 16 Sqmm cable as per G of Annexure B. Special Conditions 1. The supplier shall take up installation, wiring, testing and commission with minimum one month prior notice period from Railways. 2.All the required cables/Miscellaneous items for commissioning shall be supplied as part of this contract 3.Supply, installation, testing and commissioning of SPDs(class B&C) are covered in scope of this contract, Supply items shall be inspected by RDSO.	RDSO
2	2	Supply and Laying of PVC Warning Tape color Orange, width of 250mm (10") by printing with black letters 'Indian Railway Signal/Telecom/OFC Cable' on both side. Before supply, sample to be got approved by Railways.	Consignee
3	3	Supply and provision of teak wood cable clamp base plank with support plank of suitable for full location box.	RDSO
4	4	Supply and provision of teak wood cable clamp base plank with support plank of suitable for Half location box	Consignee
5	5	Supply and laying of 50Sqmm insulated copper cable in suitable PVC pipe. All other materials required for installation to be arranged by contractor. (This item is for conventional lightning arrester). Inspection: Consignee.	Consignee
6	6	Supply and installation of HRC Fuse base and carrier-32A with 2/4/6/10/16/20/32/50. A fuse as per the load condition. (HRC fuse base, carrier and fuses shall be procured from standard firms. Cu ligs 3/0.75mm wire and other required materials shall be supplied by contractor.	RDSO
7	7	Multi Section Digital Axle Counter(MSDAC): Supply, design, installation, testing and commissioning of Multi Section Digital Axle Counter (MSDAC) complete system as per RDSO Specification No. RDSO/SPN /176/2013 version.3 with latest amendments STR No. SIQ 0001 Ver.2.0 or latest. It shall contain 360 DPs (LOGH-HSRA Section DPs) and 96 Track Sections . Suitable for commissioning of Automatic signalling as per	RDSO

		SIP (copy enclosed). Tenderer shall design the scheme for provision of required number of evaluators, trackside junction boxes, detection points and track clearance relays etc to be submitted along with the offer. MSDAC should have facility to reset track sections. System shall be with cooperative type design and the total cost breakup shall be given against the Tender for OEM components along with the offer or before issue of LOA. Tool kit as per RDSO specification. SCOPE OF SUPPLY: PLEASE REFER ATTACHMENT - FOR SCOPE OF SUPPLY & OTHER TERMS AND CONDITIONS FOR SUPPLY AND INSTALLATION OF THE EQUIPMENT. PLEASE NOTE: 1) Signalling Plans (SIPs) of LOGH-HSRA Auto section may be collected at office of Dy.CSTE/Project/SBC Office, 2nd floor, Rail Sanraksha Bhavan, Bangalore-560023. 2) For any clarifications with regard to Drawings/ technical details please contact Deputy CSTE/Project/SBC Office @ the above-mentioned address.	
8	8	Tool set for wheel sensor mounting and maintenance of MSDAC consisting of torque wrench, ratchet, testing plate, measuring tape, screw driver, and gloves and multi meter fluke 115.	CONSIGNEE
9	9	Supply and provision of Modular power supply arrangements for operator/ Maintenance VDU PC, MT PC and embedded PC. This consists of i) 110V DC/110V AC 500VA inverter- 2Nos ii) 110V DC/24V DC 10A-2 Nos Gallant make or better (This includes suitable enclosures/Fixture as per site requirement. As per RDSO Technical Advisory Note no. 3012 version 3.0, dt. 03.11.2022.	MITES
10	10	Provision of Earth connection to Location Boxes and Signals with MS Flat as per Drg.No. RVNL/S&T/SC-07/2016:	Consignee
A	A	a) Supply of MS Flat of size 40x6mm at site which includes loading, unloading, transportation and fixing.	Consignee
B	B	b) Supply of GI bolt of size M20x40mm with two Nuts along with two plain washers and one spring washer	Consignee
C	C	c) Supply of GI bolt of size N12x25mm with two Nuts along with two plain washers and one spring washer.	Consignee
D	D	d) Drilling of holes in MS Flat of different sizes at site.	Consignee
E	E	e) Cutting, bending and twisting of MS Flat duly heating at site.	Consignee
F	F	f) Painting of MS Flat with one coating of red oxide as primary and two coats of anti- corrosive black.	Consignee

Schedule E1 (ELECTRONIC INTERLOCKING WORK – SUPPLY)			
		All Schedule E Items Supply and Installation shall comply all the TANs issued on Electronic Interlocking. 1. RDSO TAN No. STS/E/TAN/3012 Ver-3.0 dated 28.06.2021 or latest) 2. As per RDSO Ltr No: RDSO-SIGOMISC(GEN)/1/2021Part(1) Date: 17.08.2024 for Provision of Kavach interfaces in Electronic Interlocking. 3. RDSO TECHNICAL ADVISORY NOTE No. EI/TAN/Security Ver 1.0 dt 01.03.2023 or latest including correction slips up to date of opening of tender on Cyber Security aspects of Electronic Interlocking system. 4. RDSO Technical Advisory Note No. STS/E/TAN/3007 Ver. 1.0 Date 02.11.2012 or latest, Maintenance terminal (Industrial grade embedded Fan less PC). 5. RDSO's TAN No. STS/E/TAN/3006 Ver 3.1 dated 30.06.2025 or latest on Earthing, bonding, Surge and Lightning protection system for S&T installations.	
1	1	Supply of Electronic Interlocking (EI) excluding Panel Processor, (Hot Standby) for stations with Signalling functions up to 125 units as per Function table enclosed along with 15% spares, tools, manuals and Instruments. EI to be provided as per RDSO Spec No. RDSO/SPN/192/2005 or latest. This includes supply of Maintenance VDU and Maintenance PC (embedded PC) and all types of indoor relays along with point contactor relays (QBCA1) required for points/other indoor purposes. Supply of EI items must be suitable for use in 25 KV RE area and conforming to RDSO Specifications No. RDSO/SPN/192/2019, Ver. 2 or latest RDSO specifications and RDSO/Railway Board recommendations, technical recommendations of RDSO. The architecture of EI i.e., Centralized or Distributed shall be as per requirement of Zonal Railway. (In case of EI to be used in distributed mode- the architecture and distribution of EI shall be as per RDSO TAN No. STS/E/TAN/3012 Ver-3.0 dated 28.06.2021 or latest) (including correction slips up to date of opening of tender); mainly consisting (but not limited to) of: and RDSO TECHNICAL ADVISORY NOTE No. EI/TAN/Security Ver 1.0 dt 01.03.2023 or latest including correction slips up to date of opening of tender on Cyber Security aspects of Electronic Interlocking system. a) Microprocessor Equipment (Having Hot standby system provided with facility of automatic changeover) CPU Connectivity shall be as per latest technical recommendations of RDSO (up to date of opening of tender). b) 110V AC to be used for LED signal lighting. c) Interface equipment/Relays, Optical interface/FDMS and System output required to drive field gears - Relay interface. d) All types of indoor relays and Point Operation Relays/ Point Group Contactor Relay_QBCA1 relays as per practice of Railways as required at site and as per instructions of Railway supervisor In-charge at site. e) Including LED Lamp Proving Relays.	Material as per IRS specification to be inspected by RDSO. (Like EI, Relays, Tag block, Wires, data logger etc.) remaining other material by Engineer.

		f) Signal & Point Fuses, Tag blocks with cover, interconnecting indoor cables and Wiring Materials. g) Maintenance Terminal (Industrial grade embedded fan less PC as per RDSO specification and latest RDSO Technical Advisory Note No. STS/E/TAN/3007 Ver. 1.0 Date 02.11.2012 or latest for online logging, & provision to be made for two additional spare ports. VDU will be of 24X7 operation professional grade type SIZE 55" with suitable mounting arrangements. No separate payment will be made for this VDU, PC, Table and mounting arrangements. The computer table shall of reputed make such as Godrej/Damro or better) with rectangular top of minimum 1.4 mtrs length, 0.8 mtr width and 0.7 mtr height with suitable shelves for installation of Embedded PC and Power supply modules etc., as instructed by Railway Supervisor In-charge at site. Note: This embedded PC shall be compatible/suitable for working as operator PC, in case of any emergency. h) Protocol converter for data transfer to central monitoring unit through data logger. i) Inbuilt power supply equipment and busbar. j) Relay racks, fixtures, mounting arrangements, Ladder, runway, and accessories as per instructions of Railway supervisor In-charge at site. k) Protective devices like fuses, lightening and surge protectors etc. as per requirement and recommended by manufacturer and RDSO l) Interconnecting copper/optical cable along with interface to make connections between EI and CCIP with Panel Processor/ VDU as per RDSO Specification Cl. 5.1.4. <i>(Station Master is to be provided with either CCIP and one operating VDU or DUAL VDU as per the zonal Railway requirement. However, SM room and equipment room may be situated in two different building and therefore may be required to be provided with augmented surge protection/Optical interface by EI Manufacturer.)</i> m) Termination of functions up to cable termination rack. n) Remaining other relays, wiring material etc., if any. o) OPERATOR VDUs shall be paid separately under separate supply item. p) Configuration of the system to be supplied by the contractor shall be got approved from Dy.CSTE/Proj/SBC before placing the order. q) Compliance of RDSO Specification: Information to be furnished by purchaser. IMPORTANT NOTES: I. Description of various modules, sub assembly and other accessories required for the above work with unit rate to be furnished by EI manufacturer/contractor. The manufacturer shall advise complete list of items in a set required for EI	
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		system before placing demand for RDSO call letter. Quantity and total cost should be submitted by the EI Manufacturer/Contractor by attaching as annexure. II. The spares for Electronic Interlocking (EI) hardware I/O (including spare bits and spare cards) shall be provided to the extent of a minimum of 15%, as detailed in this Para II and Para III. While designing the interface circuits/ bit charts of the EI system, it shall be ensured that the EI system should have 10% spares as input bits, 10% spares as output bits in form of available hardware along with 5% of spare slots for future alterations. While reckoning the spares in numbers, the spare bit in form of available hardware shall be rounded off to the higher integer and spare slots shall be rounded off to the next higher integer based on the capacity of I/O cards. In case of Distributed EI, this requirement shall be met for each distributed location. III. Supply of essential spares to the extent of 5% subject to minimum of one, for the cards/modules/PCB, fuses, all types of relays along with bases, lightening arrestors, isolators, convertors etc used in the complete EI system. Item-wise details of spares to be supplied with unit rates should be listed out by the tenderers in separate annexure. NOTE: For calculating spares of station total items installed under item No. E1(1) & E1(2) and E1(3) must be considered. IV. Supply of Tools and Instruments - Tool Kits and Measuring Instruments for technicians/Junior Engineers for testing & maintenance and repair at site and troubleshooting of hardware & software for EI systems as per manufacturer's recommendations. List of instruments & tool kits to be provided by the supplier along with numbers is furnished below. EI tool kit required: Make Taparia or Bosch or better reputed brand, as instructed by the Railway Engineer in-charge. 1. Crimping tool set – 1 No. 2. Crimp insert set – 1 No. 3. Extract tool set – 1 No. 4. Insertion tool set – 1 No. 5. Location tool set – 1 No. 6. Screw driver adjustable – 1 No. 7. Spanner Double ended – 33 mm x 29mm 8. Spanner Double ended – 3/8 x 1/2" 9. Spanner Double ended – 5/8 x 3/4" 10. Spanner Double ended – 7/8x1" 11. Adjustable screw spanner – 12" 12. Insulated cutting plier – 1 No.	
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		13. Insulated Nose plier – 1 No. 14. Hacksaw frame – 1 No. 15. Electronic Soldering Iron 230v/60W – 1 No. 16. Digital Multimeter (Fluke) Model No. 101 or better – 1 No. 17. AC/DC clamp meter Digital Fluke Model No.362 or better – 1 No. 18. Earth Resistance Meter Make: Waco Model: Det 4100 or better – 1 No. 19. Digital Insulation Resistance Tester Make: Rishab Model: Rish Insu 20 or better – 1 No. 20. Cabinet to store tools. All the application software and hardware shall be suitable for CTC. The network elements required including FMS at station end for CTC networking are supplied as part of this schedule item wherever applicable. MPLS/STM and Dual fibre connectivity will be made available by Railways For the purpose of the calculating the functions for EI, bits required for EI system functions such as booting and VCOR etc are not considered.	
2	2	Payment under this item will be made for Electronic Interlocking supplied against item no E1(1) by calculating the functions controlled by EI (for entire set, set means station) as per Function Table (Annexure-D) enclosed with the Bid document. Functions up to 125 is covered under item no E1(1) . For each additional function beyond 125, payment will be made against this item. Typical value of each function is indicated in the enclosed table and based on the actual number of functions controlled by the EI, the total value of functions can be calculated. The technical specification mentioned at item No. E1(1) above are also applicable for this item.	
3	3	Supply of Electronic Interlocking Items for end location (Goomty) for station/IBH/Auto Hut for distributed Architecture in connection with item No.1 as per Function table enclosed along with 5% Spares, tools, manuals & instruments.	
	E2	ELECTRONIC INTERLOCKING -EXECUTION	
1	1	This includes: - Installation, Wiring, testing, Soldering of all EI equipment with contractor's material including wiring & soldering of panel, relays, Goomties (where ever provided) and bringing the functions up to CT Rack in same room. - Supply of all related consumable materials like rosin core, lacing thread, PVC bunching tape and buttons eyelets of sizes,. Etc. - Power wiring of all EI equipment, laying of power cable from IPS room to EI room and to all other associated functions like panel processors, interface relay racks, datalogger, maintenance terminals etc. - Contractor's Testing and organizing testing for Railway. The testing includes -Functional testing, selection table testing with contractor's simulation panel.	CONSIGNEE

		e. Earthing of EI Equipment, Relay Racks and Power Equipment, Panel room etc. and connection with bonding ring conductor, to be done along with supply of all requisite materials as per EI requirement, RDSO directives and Signal Engineering Practice for lightening protection as per RDSO's TAN No. STS/E/TAN/3006 dated 02.11.2012. [Earth pits, supply of earth electrodes are not covered under this schedule. All other materials required for earthing like bonding ring conductor (BRC), 35/16/10 Sq.mm. cable and nuts, bolts and other miscellaneous items shall be supplied by the contractor] f. Supply of Flexible Wire Copper multistrand, 16 Sq.mm, PVC insulated insulation thickness of 1.5 mm$\pm$0.15; conductor resistance not exceeding 1.21 ohms per Km at 20 degree Centigrade; over all core diameter 8.45mm$\pm$0.25; conductor diameter: 0.400mm$\pm$0.005; Number of conductors:126 and test parameter as per specification no: IRS:S 76/89 Amendt-3 for wiring from IPS room to EI room and power wiring as per site requirement.	RDSO for sub-item (f)
2	2	Commissioning of Electronic Interlocking system (This includes EI and associated OCs) after interfacing of indoor equipment with outdoor gears in association with Railway Personnel during Non-Interlock working. Competent Engineer of manufacturer must be available during Pre NI, NI and Post NI.	CONSIGNEE
3	3	DESIGN AND DRAWING WORK – EXECUTION: Design and drawing for complete indoor signalling work for new PI/EI/RRI station as per practice in Railway. This also includes associated Ocs. This includes Factory Acceptance Test (FAT) in case of EI. Note: No additional payment will be made for minor alterations i.e. up to 10% of routes of earlier approved SIP. If the alterations are more than 10%, additional payment will made for altered/new routes on pro rata basis. Supply of Documents/Manuals for EI System as per para 10.1 of RDSO Specification No: RDSO/SPN/192/2019, Ver. 2 or latest RDSO specification. Initially Contractor shall submit 2 sets of 'AS PLANNED' documents such as Interface circuit, Application logic circuit in complete for approval of Railways. One set is returned either duly approved for making a fair copy or for re-submission for approval after incorporating the changes as required by Railways. After Completion of work, 2 sets of 'AS MADE' Check Prints are to be submitted for approval. Railways will return one set to the contractor duly approved with alterations/corrections if any. The contractor shall incorporate Railways alterations/corrections in the tracings (film) without any deviation and submit all tracings (film) complete in all respect along with its soft copies in USB Pen Drive and 6 sets of final completion drawings in properly bounded booklets. [For Centralized Electronic Interlocking Stations/Small Stations]	CONSIGNEE
4	4	ALTERATION IN EXISTING STATION:- Alteration to Software, hardware, wiring, testing & Commissioning (Including FAT & SAT etc.) of EI equipment's as per RDSO Specification No. RDSO/SPN/192/2005 or latest. This work involves alteration of the software, hardware, wiring, validation of Data logger & alteration in datalogger wiring up to CMU suit in the revised signaling plan of station in connection with ABS work. Any additional cards are required for the above work shall be supplied by contractor.	CONSIGNEE
		PHASE DRAWINGS: Designing the modification to existing approved SIP, LT/ST/TOC, PD, SWR and logic and wiring in EI OR wiring circuits in PI to suit proposed Yard Layout in connection with phase working while extending doubling / Third line as per work requirement. NOTE: This item to be operated while commissioning of doubling/ third line at one end of the yard and other end will remain as existing	CONSIGNEE

	single/double line/ third line or part commissioning of yard for re-grading to facilitate development of phase drawings and phase commissioning. Following description remains common for all the items covered in item no E to E1. This includes: DESIGN & DRAWING: Design Includes all gears of the station like Block, panel, LC gate, ICC, etc as indicated in Signal Interlocking Plan-INDOOR: Design, preparation & supply of prints in Auto CAD format of various documents /diagrams /sketches listed below in A3 size for stations. The Contractor shall initially supply 2 sets of complete documents/circuits duly signed by the designer for approval of Railways.	
	- Designer has to coordinate with Approving authority to understand the local Railway's practice and carry out modifications accordingly. Railways will return one set of documents/circuits to the contractor duly approved with alteration/corrections if any. The contractor shall incorporate Railways alterations/corrections in the original tracing & CD without any deviation and submit 3 prints of complete document/circuits. - The work shall be executed only as per approved final documents/circuits. After completion of work the contractor shall submit Completion tracings modified as per completed work, after approval of tracings, final completion CD complete in all respect along with 6 sets of prints of completion documents/ circuits along with approved tracings shall be submitted. The papers used for tracing and prints should be of superior quality. Transparent polythene covers duly covering each sheet of one set of print out of 6 sets of prints of completion documents/circuits shall be supplied. - Note: The Size of SIP, Front Plate Diagram and Route section diagram may be in different sizes as per the requirement and practices of the Railway. INDOOR DRAWINGS: List of Documents (Only the required drawings):- Front Panel Diagram, Route section diagram, Locking Table/Selection Table/Table of Control, Station Working Rule Diagram, Contact analysis, Application Programme listing/Wiring Diagram, Input/Output chart along with all logic details with proper contact analysis, Record of one wire/two wire termination on tag block, Power Supply, Equipment layout particulars in Relay room and Equipment rooms, Relay disposition diagram in Relay room, CT rack details, Completion documents like I.P., LT etc.	CONSIGNEE
	PHASE WORKING: Complete Indoor work of Alteration to existing circuit OR Modification to existing Logic and Wiring in EI. This includes Wiring of relay base plate to other base plate, to IDF, to tag block, jumpering, function wiring up to CT rack, fixing of Relays, Wiring of Fuse, power equipment, block instrument, operating panel, key lock, test board etc., fixing of ladder, relay plug boards, terminal, blocks, terminals fuse board, fuses bus bar, lacing of wires, fixing of eyelet, modification in operating cum indication panel to suit yard layout etc. as per approved diagram or Logic , testing & soldering after testing. Contractor's Testing and organizing testing for Railway -Functional testing, selection table testing with contractor's simulation panel. This includes supply of all related consumable materials like Complete wiring material, rosin core, lacing thread, PVC bunching tape and buttons eyelets of sizes, Resistance, condenser, diodes, LED's etc as per the existing arrangement in Relay rooms in connection with (a) modification from Double Line to Third Line related with extn of third line. OR (b) modification from Single Line to Double Line related with extension of Doubling. (c) Part commissioning of yard to facilitate re-grading.	CONSIGNEE

Schedule-F (TELE) Supply & Installation (Non-SOR)		
1	Supply and installation of covered 19" 42 U racks of size 600mm depth Telecom Rack with Standard Accessories (Closed type Telecom Rack) with front door Glass type, all Doors [Detailed Specification in Technical Document].	UTES
2	Supply and Installation of Rack mountable 48 Fibre management system (FMS) conforming to RDSO/SPN/TC-37/2020(rev-4) or latest similar to COMSCOPE make or better, suitable for splicing and front patching 48F cable with all accessories and terminating the optical fibre cable with splicing and front patching in FMS in the equipment room . (OFC Pigtail patch chords of suitable length and all other materials required for splicing are to be supplied by contractor).	UTES
3	Supply, fixing and termination of 24F FDMS 19" Rack Mount with Telescopic type loaded with SC '0' DB & Adaptor SC SM Pigtail 1.5 meters all accessories required for installation [Detailed Specification in Technical Document].	CONSIGNEE
4	Supply and installation of SIP Based Basic IP Phone with 128x64 or better Pixel Graphical LCD as per Specification.	CONSIGNEE
5	Supply and installation of Layer 2 Switch as per RDSO/SPN/TC/65/2021, Rev.6.0 or latest. Minimum 8+2 Port Manageable with 8 Nos 10/100/1000 Mbps Ethernet port, POE+ & Single Fiber 2 Nos 1G SFP Port with BX SM SFP Optical Modules loaded. with all accessories etc. As per RDSO/SPN/TC/65/2021, Rev.6.0 or latest. Inspection: RDSO.	RDSO
6	Supply and installation of OFC Joint closure conforming to TEC Spec. and splicing of Optic Fibre Cable' (48 Fibres) and testing of fibre for 1310 :1550 nm.	UTES
7	Supply and Installation Testing and Commissioning of Isolated DC-AC Inverter 1+1HA input 48 V DC, Output:220V AC 1000VA or higher, with all required Protection Circuits.	UTES
8	Supply and Fixing of PVC Conduit Pipe minimum 35 mm Dia ISI Mark. Installation of PVC Pipe, clamping of the same on Wall, Pole etc. including with required clamps & and all the installation materials required. [Detailed Specification in Technical Document]	CONSIGNEE
9	Supply and provision of trunking of 65mm cover 50*80 including section and accessories, compartment, extra portion, fish plate, body joint , cover Joint, High spacer angels, end caps etc. complete set. Make : Legrand or similar.	CONSIGNEE
10	Supply, installation and commissioning of 48v DC/200AH VRLA battery as per IRS S 93/96 (A) with amendment-1 or latest. Make Amaraja or similar firm's offer Exide make.	RDSO
11	Supply , installation and commissioning of 48V,25A SMPS charger with 03 no.s of 48v / 25Amps rectifier modules to charge VRLA battery as per RDSO spec. SPN-TL- 2399 version 4 or latest	RDSO

Schedule-F1 (TELE) (SUPPLY _Non-SOR)			
1	1	Supply of CAT-6 Patch Cord-5mtrs length [Detailed Specification in Technical Document] Inspection: Consignee	Consignee
2	2	D-Link Blue CAT6 U/UTP Patch chord 2.0 mtrs. Detailed specification as per Product#1 of GeM Contract No.GEMC-511687778093889 dtd 30/01/2023)	Consignee

3	3	Supply of STP CAT- 6 Cable compliant with latest EIA/TIA-568-C.2 Standard for CAT 6 Cable 305 Mtrs Roll /Bundle. [Detailed Specification in Technical Document]	Consignee
4	4	Supply of RJ 45 connector suitable for STP/UTP Cable (D-Link) [Detailed Specification in Technical Document]	Consignee
5	5	Supply of Standard 19" Rack Mountable LER(Label Edge Router) IP- MPLS Router with Redundant DC power feed -48V DC nominal equipped with interfaces: (i) 4x10G (optical) ports, distributed in minimum two cards, minimum 2X10G in each card, to connect to the adjacent stations. (ii) 4x1GbE (copper) ports to connect various networks at stations. (iii) 8x1GbE (optical) ports, distributed in minimum two cards, minimum 4X1GbE in each card, to connect various networks at stations optically. (iv) 2 x 8 E1 (G.703) or 1x16 E1(G.703) for working various TDM circuits of stations with necessary Krone module termination and wiring etc All 10G optical interfaces shall be equipped(Loaded) with suitable optics to work on two single mode fibres upto 40km and 1G optical optics with SM Single fiber SFP. Mounting kit with all necessary accessories like Power cable, Earthing Cable, Optical Patch Cords of 3 mtr- 6 Nos. for LERs, Cat 6 Patch Cords of 1 mtr -4 Nos, one dual pole MCB for each LER, wiring etc. & Software, Perpetual Licenses. RDSO Spec: RDSO Technical Advisory Note(TAN) for Implementation of IP-MPLS Technology for Unified Communication Backbone on Indian Railway" TAN No. STT/TAN/IP- MPLS/2020 Version 3.0 or latest Inspection : RDSO	RDSO
6	6	Supply of Single Mode Patch Cord length 10 meters (LC-SC/SC-SC/LC-LC/FC-LC) as per site requirement [Detailed Specification in Technical Document] Inspection: Consignee	Consignee
7	7	Supply of Single Mode Patch Cord length 3 meters (LC-SC/SC-SC/LC-LC/FC-LC) as per site requirement [Detailed Specification in Technical Document] Inspection: Consignee	Consignee
8	8	Single fiber fusion splicer similar to fujikura 80C with standard accessories : ACADAPTER /BATTERY Charger ADC-18 1PC, AC Power Cord ACC-XX: 1PC spare electrode Elect2-20:1 pair carrying case CC-30:1PC USB cable USB-01: 1PC Sleeve loader SL01:1 PC dispenser AP01: 1 PC screwdriver SC-01 1PC, Instruction Manual: 1 PC Quick reference Guide 1PC warning& cautions: 1 PC ; BATTERY RACK BRT-09, Battery charger cord DCC-18: 1 PC High precision Fiber cleaver CT-06: 1 PC, 3 in1 Stripper : 1PC & Protection sleeves: 25nos. (A demo shall be arranged along with supply) as per TEC Specification g/osm/01-03 April2005 Model S177A.Make FURUKAWA ELECTRIC CO Japan. Type approved or Similar. [Detailed Specification in Technical Document].	MITES
9	9	Supply of Optical Time Domain Reflectometer for 1310/1550nm fiber with resolution of 60 Cms, dynamic Range of 314/29 dB with all accessories confirming to TEC Specification No TEC Specification No G/OTD/02-03 March 2009.Make EXFO Model MAX 720C , AQ7270+735022.Make Yokogawa Electric Co Ltd Japan or Similar. Detailed Specification in Technical Document.	MITES
10	10	Supply of Cable Route Locator set consists of seek Tech SR 20 receiver with 5 watt cable line transmitter seek tech ST-305 with the following specification and suitable rechargeable cells, chargers 03 Nos. with suitable carrying case. 1. Target line and guide arrow quickly identify distortion. 2. Proximity signal and signal strength help work through difficult locats. 3. Trace any frequencies from 10HZ to 35KHZ. 4. Active live trace frequencies from 10HZ to 35KHZ. 5. Passive power trace 50HZ, 60HZ, <4KHZ brodline. 6. Passive power trace 4KHZ - 15KHZ - 36KKHZ. 7. Sound frequencies 16HZ, 5123HZ, 640HZ, 850HZ, 8KHZ, 33KHZ. 8. Power source 4C Cell batteries included. 9. 30 user definable frequencies can be set from 10HZ to 35KHZ. MAKE/BRAND SR20 Complete Set or similar equivalent Inspection by MITES MAKE: RYCOM Instruments or better	MITES
11	11	Supply of cable fault locator similar to ANDIG model 5289M or better (contractor has to arrange field demonstration /field trail test at railway nominated site & OEM test certificate to be produced)	Consignee
12	12	Supply of LAN tester UTP cable tester similar to make of Voltec/D-Link.	Consignee
13	13	6 Amps MCB single pole of Legrand make or Similar.	Consignee
14	14	Supply of 10 pair Switch board cable telephone cable 05mm dia, annealed copper conductor PVC insulated as per IPS TC-24/91	Consignee

15	15	Supply of suitable enclosure with internal wiring arrangement for VHF AC mains as per the site requirement.	Consignee
16	16	Supply of 12v 65Ah sealed power safe SMF battery	Consignee
Schedule-F2 (TELE) (INSTALLATION_Non-SOR)			
1	1	Installation, Configuration, Commissioning & Testing of LER & LSR IP MPLS Routers including supply & Installation of all the accessories like Power cable, Earthing Cable, Optical Patch Cords of 3 mtr- 4Nos for LER & 8 Nos for LSR s, Cat 6Patch Cords of 1 mtr -4 Nos ,Two no's 6AMCB for each LSR and LSR , wiring etc.as required for Routers	Consignee
2	2	Excavation of jointing pit without damaging the fiber and provision of joint chamber of 1.2 Mtr. dia , 0.60Mtr. height and 50 mm. thickness with two piece top cover and bottom cover with holes for drainage and cable entry (The reinforcement drawing enclosed). This includes backfilling and ramming of the trench after placing the joint closure and cable loop in the chamber without causing any damage to the same and consolidation of soil as well as disposal of soil as per plan and as advised by railways representative.	Consignee

Schedule-G (Fire Alarm)			
1	1	Supply, installation, testing and commissioning of Heat and smoke multi sensor as per RDSO/SPN/217/2025 ver-3.1 or latest. along with its base, backbox and all accessories in compliance with IS:2175 and IS:11360 standards and Underwriters Laboratory (UL) listed. (As per RDSO TAN 3009 Ver 1.0, Document No.STS/E/TAN/3009 dated 17.02.2025 or latest).	RDSO
2	2	Supply, installation, testing and commissioning fault isolator as per RDSO/SPN/217/2025 ver-3.1 or latest with back box and all other accessories. `	RDSO
3	3	Supply of Analogue LHS cable as per RDSO/SPN/217/2025 ver-3.1 or latest	RDSO
4	4	Supply, Installation, testing and commissioning of linear heat sensing interface module, (Monitor module) for LHS cable with backbox and all other accessories as per RDSO/SPN/217/2025 ver-3.1 or latest in compliance with IS standards and Underwriters Laboratory (UL) listed.	RDSO
5	5	Supply of Fire survival cable 2c x 1.5 sq.mm unarmored as per RDSO/SPN/217/2025 ver-3.1 or latest	RDSO
6	6	Supply, installation, testing and commissioning of Networkable single loop addressable Fire alarm Control panel expandable upto 4 loops with GSM interface (without GSM module) as per RDSO/SPN/217/2025 ver-3.1 or latest. This work involves supply, fixing, installation and testing of control panel. The control panel shall be networkable to Zonal /Divisional headquarters preferably over TCP/IP and shall have clock synchronization facility. This includes Networking module (TCP/IP) for control panel along with power supply unit and battery set of required capacity for 24 hours backup as per RDSO specification. The panel should support degrade mode operation in compliance with IS: 2189 , EN 54 standards and	RDSO

		Underwriters Laboratory (UL) listed.	
7	7	Supply, installation, testing and commissioning of GSM module for Control panel with backbox and all other accessories as per RDSO/SPN/217/2025 ver-3.1 or latest. with auto dialer function to SMS during failure or fire situation.	RDSO
8	8	Supply, installation, testing and commissioning of Manual call point (resettable) with backbox and all other accessories as per RDSO/SPN/217/2025 ver-3.1 or latest.	RDSO
9	9	Supply, installation, testing and commissioning of Relay module with backbox and all other accessories as per RDSO/SPN/217/2025 ver-3.1 or latest.	RDSO
10	10	Supply, installation, testing and commissioning of Hooter and Visual strobe alarm units with backbox and all other accessories as per RDSO/SPN/217/2025 ver-3.1 or latest along with its power supply unit.	RDSO
11	11	Supply, installation, testing and commissioning of Control module with backbox and all other accessories as per RDSO/SPN/217/2025 ver-3.1 or latest.	RDSO
12	12	Supply, installation, testing and commissioning of EOL as per RDSO/SPN/217/2025 ver-3.1 or latest as directed by the site engineers.	RDSO
13	13	Supply, installation, testing and commissioning of Monitor module for 3rd party with backbox and all other accessories as per RDSO/SPN/217/2025 ver-3.1 or latest	RDSO
14	14	Laying / drawing of various type of cables on PVC pipe / capping casing, or cable trays, ladder, shelter etc as instructed by Railway engineer at site. (Indoor cables to be drawn through pipe, outdoor cables if required to be clamped on wall/floor etc.	CONSIGNEE
15	15	Supply, installation, configuring, testing and commissioning of remote monitoring software along with license for 99 control panels as per RDSO/SPN/217/2021 ver-3.0or latest. This includes necessary gateway card and network interface card for the system fully functional as desired by Railways.	RDSO
16	16	CO2 Fire Extinguisher: Supply, installation, testing and commissioning of CO2 fire extinguisher 6.5 kg capacity conforming to IS 15683 with ISI mark provided with all fittings and accessories. Make Safex/Bharat or similar	CONSIGNEE

Schedule-H (Design, Preparation & Verification)			
1	--	Independent checking and verification of Interface circuits for stations having up to 25 Routes by IRSE/IRSTELO License Holders	Consignee
2	--	Independent checking and verification of application logic circuits for stations having up to 25 Routes by IRSE/IRSTELO License Holders	Consignee
3	--	Additional payment for checking and verification of interface circuits/Logic circuits having more that routes by IRSE/IRSTELO License Holders.	Consignee
DESIGN & PREPARATION OF SIP & TOC:			
4	4	DESIGN & PREPARATION OF SIP & TOC:- Design, preparation and submission of SIP for 4 line station yard.	Consignee
5	5	DESIGN & PREPARATION OF SIP & TOC:- Design, preparation and submission of SIP for 5 line station yard.	Consignee
6	6	Design, preparation and submission of Signal Interlocking Plan (SIP) for one Automatic Block section between two Stations.	Consignee
7	7	Design of Cable route plan, cable core chart, location box particulars, panel particulars, fuse particulars, track bonding diagram, numbered wiring diagrams, relay index, contact analysis, posting of Contacts in wiring diagram to be supplied by railways, surveillance particulars, data logger particulars, K- rack details, resistor, condenser particulars, power equipment wiring.	Consignee
8	8	Preparation and supply of station working rules (SWR) as per South western Railway practice, based on SIP and Table of controls for two/three road station. The item includes two sets of documents for approval, after approval Contractor will supply completion SWR and spiral binding booklets 6 Nos. (Six No's)	Consignee

PROCESS FLOW FOR CHECKING & VERIFICATION OF INTERFACE CIRCUIT / APPLICATION LOGIC CIRCUIT :

SCOPE :	Understanding the principles and practices of Signaling Designs of South Western Railway and carrying out checking and verification of Interface Circuit / Application Logic Circuit based on Approved SIP and TOC by IRSE / IRSTELO License Holders. The Interface & Application Logic Circuit should be checked and verified by IRSE / IRSTELO License Holders, having License for Verification of Circuits, and should be Signed by them, mentioning the Name and Designation of the License Holder.
STEPS / DESCRIPTION	CHECKING & VERIFICATION OF INTERFACE CIRCUIT / APPLICATION LOGIC CIRCUIT
STEP 1	Submission of Interface Circuit / Application Logic Circuit in Soft/Hard copy by EI Vendor to Dy.CSTE/Proj/SBC. Dy.CSTE/Proj/SBC shall forward the same to Contractor.
STEP 2	Checking and Verification of Interface Circuit / Application Logic Circuit in Soft/Hard Copy by Contractor and submission to Dy.CSTE/Proj/SBC with observations / comments. Dy.CSTE/Proj/SBC shall forward the same to E.I. Vendor.
STEP 3	Compliance of Observations / comments by E.I. Vendor in Soft / Hard Copy and submission to Dy.CSTE/Proj/SBC. Dy.CSTE/Proj/SBC shall forward the same to Contractor for confirmation of Compliance of observations / comments. Contractor shall submit the Signed Soft / Hard Copy to Dy.CSTE/Proj/SBC, duly confirming the compliance of the observations / comments.
STEP 4	Dy.CSTE/Proj/SBC shall forward verified & Signed Document in Soft / Hard copy to Office of CSTE/Proj/UBL.
STEP 5	CSTE/Proj/UBL Office shall carry out Final Checking of Interface Circuit / Application Logic Circuit and observations if any will be forwarded to Dy.CSTE/Proj/SBC / E.I. Vendor for updating of observations.E.I. Vendor shall submit FINAL Interface Circuit / Application Logic Circuit to Dy.CSTE/Proj/SBC / Office of CSTE/Proj//UBL, for Approval.

EXPECTED TIME LINE (D : Date of making available all base documents)

Name of document to be submitted to Railways	Base Document issued by Railways	Time for submission to Railways after checking/verification by IRSE/IRSTELO License Holders (In working Days)		
		Up to 50 Routes	Up to 150 Routes	Up to 250 Routes
Interface Circuit	Approved SIP	D+20	D+30	D+40
Application Logic Circuit	Approved SIP & Approved TOC	<u>D+25</u>	D+35	D+45

Time Line for Submission of Documents to Railway by contractor after checking, verification & signing (D: Date of issuing base document by Railways) : These time lines are applicable for all the stations in this work together or individually as per base documents issued by Railways :

Name of document to be submitted to Railways	Base Document issued by Railways	Time for submission to Railways after checking and verification as per check list (In working Days)		
		Up to 5 Lines	Up to 08 Lines	Up to 12 Lines
Draft SIP for approval	Existing SIP & ESP	D+20	D+30	D+40
Draft TOC for approval	Approved SIP	<u>D+15</u>	D+20	D+25
Draft Station Working Rules & Gate Working Rules	Draft SIP, existing SWR & GWR	<u>D+30</u>	D+40	D+50
Final Draft Station Working Rules & Gate Working Rules	Approved SIP, RD & TOC	<u>D+15</u>	D+20	D+25

Tender Notice: No. B-SG-PRO_LOGH_HSRA_AUTO Dated: 06.09.2025

Time Line for Submission of Documents to Railway by contractor after checking, verification & signing by IRSE/IRSTELO License Holders
(D: Date of issuing base document by Railways) : These time lines are applicable for all the stations in this work together or individually as per base documents issued by Railways :

If Contractor fails to submit above documents within time frame mentioned without any reasonable justification convincing Railways, a suitable penalty will be imposed for the period of delay for each document. Decision of Railway is final this regard.

Chapter -IV

Check List to Tenderers

Checklist for Tenderers			
Sl.No	Requirements	Documents required/Remarks	Mandatory /Desirable
1	Tenderer shall download and submit Tender Document with the Digital Signature Certificate (DSC) in the name of participating Tendering Firm (Proprietorship/Partnership Firm / Company / Joint Venture (JV) / Registered Society /Registered Trust / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc as applicable) or the person authorized to submit the Tender.		Mandatory
2	Digital Signature of Tenderer/Authorized Signatory on Tender Document & Supporting Document along with addresses and phone no. for communication.		Mandatory
3	Whether the tender is submitted on his own (Proprietary Firm) /Partnership Firm / Company / Joint Venture (JV) / Registered Society / Registered Trust / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc.	Attested copies of the constitution of their concern, and copy of PAN Card along with their tender. Tender Documents to be signed by person legally competent to sign them. 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. 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 sign the tender etc.	Mandatory
4	The tender must be accompanied by a Bid Security		Mandatory
5	TENDER FORM (First Sheet)		Mandatory
6	TENDER FORM (Second Sheet)		Mandatory
7	Work(s) completion certificate(s) as per the requirement of Technical eligibility criteria		Mandatory
8	Documents as per the requirement of financial eligibility criteria		Mandatory

9	Documents for evaluating the Bid Capacity, <i>for tenders having advertised value more than Rs.20.00 crore</i>		Mandatory
10	Certificate, stating that the tenderer/s are liable to be disqualified and all their statements / documents submitted along with bid are true and factual		Mandatory
	In case the tenderer is other than Joint Venture (JV) firm, tenderer has to submit all the documents as mentioned below		
11	Type of Firm	Documents to be submitted	
	(a) Sole Proprietorship Firm:	All documents in terms of Para 10 of the Tender Form (Second Sheet)	Mandatory
	(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) All other documents in terms of Para 10 of the Tender Form	Mandatory
	(c) Partnership Firm:	(i) A notarized copy of the Partnership Deed or a copy of the Partnership deed registered with the Registrar. (ii) A notarized or registered copy of Power of Attorney (iii) An undertaking by all partners of the partnership firm that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm / LLP in which they were / are partners /members. NOTE: THIS DOCUMENT SHOULD BE SIGNED BY ALL THE PARTNERS OF THE FIRM. (iv) All other documents in terms of Para 10 of the Tender Form	Mandatory

	(d) 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) All other documents in terms of Para 10 of the Tender Form (Second Sheet) of GCC APRIL 2022.	Mandatory
	(e) LLP (Limited Liability Partnership) registered under LLP Act-2008:	(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 by all partners of the LLP that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP or JV in which they were / are partners/members. <i>NOTE: THIS DOCUMENT SHOULD BE SIGNED BY ALL THE PARTNERS OF THE FIRM.</i> (v) All other documents in terms of Para 10 of the Tender Form (Second Sheet)	Mandatory
	(f) Registered Society & Registered Trust:	(i) A copy of Certificate of Registration. (ii) A copy of Memorandum of Association of Society / Trust Deed.	Mandatory

		(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) A copy of Rules & Regulations of the Society. (v) All other documents in terms of Para 10 of the Tender Form (Second Sheet)	
12	In case the tenderer is a Joint Venture (JV) firm, tenderer has to submit all the documents as mentioned below		
13	Copy of Memorandum of Understanding (MoU) duly executed by the JV members on a stamp paper, shall be submitted by the JV along with the tender. The complete details of the members of the JV, their share and responsibility in the JV etc. particularly with reference to financial, technical and other obligations shall be furnished in the MoU.		Mandatory
14	<u>Documents of JV Members:</u>		
	Type of Firm	Documents to be submitted	
	Partnership Firm:	(i) A notarized copy of the Partnership Deed or a copy of the Partnership deed registered with the Registrar. (ii) A copy of consent of all the partners or individual authorized by partnership firm, to enter into the Joint Venture Agreement on a stamp paper, (iii) A notarized or registered copy of Power of Attorney in favour of the individual to sign the MOU/JV Agreement on behalf of the partnership firm and create liability against the firm. (iv) An undertaking by all partners of the partnership firm that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP in	Mandatory

		which they were / are partners/members. <i>NOTE: THIS DOCUMENT SHOULD BE SIGNED BY ALL THE PARTNERS OF THE FIRM.</i>	
	Proprietary Firm or HUF:	A copy of notarized affidavit on Stamp Paper declaring that his Concern is a proprietary Concern and he is sole proprietor of the Concern OR he who is signing the affidavit 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.	Mandatory
	Companies	(i) A copy of resolutions of the Directors of the Company, permitting the company to enter into a JV agreement; (ii) The copies of MOA (Memorandum of Association) / AOA (Articles of Association) of the company; (iii) A copy of Certificate of Incorporation; and (iv) A copy of Authorization / copy of Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual to sign the tender, sign MOU / JV Agreement on behalf of the company and create liability against the company.	Mandatory /
	LLP firm/s	(i) A copy of LLP Agreement (ii) A copy of Certificate of Incorporation of LLP (iii) A copy of resolution passed by partners of LLP firm, permitting the Firm to enter into a JV agreement (iv) A copy of Authorization /copy of Power of Attorney issued by the LLP firm (backed by resolution passed by the Partners) in favour of the individual, to sign the tender and/or sign the MOU/ JV agreement on behalf of the LLP and create liability against the LLP.	Mandatory

		(v) An undertaking by all partners of the LLP that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP or JV in which they were / are partners/members. <i>NOTE: THIS DOCUMENT SHOULD BE SIGNED BY ALL THE PARTNERS OF THE FIRM.</i>	
	Society/s or Trust/s	(i) A copy of Certificate of Registration (ii) A copy of Memorandum of Association of Society/Trust Deed (iii) A copy of Rules & Regulations of the Society (iv) A copy of Power of Attorney, in favour of the individual to sign the tender documents and create liability against the Society/Trust.	Mandatory
15	All other documents in terms of Para 10 of the Tender Form (Second Sheet)		Mandatory
	Following Documents is also to be submitted by the bidder		
16	Compliance of Employment / Partnership etc. of Retired Railway Employees as per Clause 16 of TENDER FORM (Second Sheet)		Desirable
17	Tenderers shall note that the submission of other following supporting documents, <i>is important and they shall ensure the same at the time of online bidding of tender.</i> However, Railways may seek clarifications / details / documents in this regard:		Desirable
18	Copy of Vendor Mandate Form		Desirable
19	Copy of the complete details of the firm to which all correspondences shall be made by the Railway.		Desirable
20	Copy of Goods and Services Tax (GST) Registration Certificate containing GST Registration Number.		Desirable
21	Copy of certificate by tenderer for site visit & familiarization as per Appendix-VI of the Tender / Technical Bid Document.		Desirable

22	Copy of the list of the Personnel / Organisation of the tenderer on hand and proposed to be engaged for this tender as per Appendix-IV of the Tender / Technical Bid Document.	Desirable
23	Copy of list of the plants & machinery of tenderer available on hand and proposed to be inducted & hired for this tender as per Appendix-V of the Tender / Technical Bid Document.	Desirable
24	Declaration of Local Content as per 'Public Procurement (Preference to Make in India) Order 2017 or latest issued by Department of Industrial Policy and Promotion under Ministry of Commerce and Industry. Bidders must declare the percentage of local content and provide a self-certificate confirming it meets the required norms. For procurements above ₹10 crores, they must also submit a certificate from a statutory auditor, cost auditor, or a practicing CA verifying the declared local content percentage.	Mandatory
25	Time frame/Bar Chart for Execution of works as enclosed in tender document	Mandatory
26	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 thereunder.	

CHAPTER V

Annexures and Proformas

SOUTH WESTERN RAILWAY

TENDER FORM (First Sheet)

Tender No.B-SG-P-SBC-, Dt, xx.....2025

Name of Work

To

The President of India

Acting through the Chief Signal and Telecommunication Engineer/Projects/Bengaluru, South Western Railway

I/We _____ have read the various conditions to tender attached hereto and agree to abide by the said conditions. I/We also agree to keep this offer open for acceptance for a period of _____ days from the date fixed for closing of the tender and in default thereof, I/We will be liable for forfeiture of my/our "Bid Security". I/We offer to do the work for _____ Railway, at the rates quoted in the attached bill(s) of quantities and hereby bind myself/ourselves to complete the work in all respects within _____ months from the date of issue of letter of acceptance of the tender.

2. I/We also hereby agree to abide by the Indian Railways Standard General Conditions of Contract, with all correction slips up-to-date and to carry out the work according to the Special Conditions of Contract and Specifications of materials and works as laid down by Railway in the annexed Special Conditions/Specifications, Standard Schedule of Rates (SSOR) with all correction slips up-to-date for the present contract.

3. A Bid Security of ₹ _____ has already been deposited online/ submitted as Bank Guarantee bond. Full value of the Bid Security shall stand forfeited without prejudice to any other right or remedies in case my/our Tender is accepted and if:

- (a) I/We do not submit the Performance Guarantee within the time specified in the Tender document;
- (b) I/We do not execute the contract documents within seven days after receipt of notice issued by the Railway that such documents are ready; and
- (c) I/We do not commence the work within fifteen days after receipt of orders to that effect.

4. (a) I/We am/are a Startup firm registered by Department of Industrial Policy and Promotion (DIPP) and my registration number is valid upto (Copy enclosed) and hence exempted from submission of Bid Security.

5. We are a Labour Cooperative Society and our Registration No. is withand hence required to deposit only 50% of Bid Security.

6. Until a formal agreement is prepared and executed, acceptance of this tender shall constitute a binding contract between us subject to modifications, as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.

Signature of Tenderer(s)

Date _____

Address of the Tenderer(s)

TENDER FORM (Second Sheet)

1. Instructions to Tenderers and Conditions of Tender: The following documents form part of Tender / Contract:

- (a) Tender Forms – First Sheet and Second Sheet
- (b) Special Conditions/Specifications (enclosed)
- (c) Bill(s) of quantities (enclosed)
- (d) Standard General Conditions of Contract and Standard Specifications (Works and Materials) of Indian Railways as amended/corrected up to latest correction slips, copies of which can be seen in the office of Dy.CSTE/Projects/SBC or obtained from the office of the CSTE/Projects/SBC, South Western Railway on payment of prescribed charges.
- (e) Standard Schedule of Rates (SSOR) as amended / corrected upto latest correction slips, copies of which can be seen in the office of Dy.CSTE/Projects/SBC or obtained from the office of the CSTE/Projects/SBC, South Western Railway on payment of prescribed charges.
- (f) All general and detailed drawings pertaining to this work which will be issued by the Engineer or his representatives (from time to time) with all changes and modifications.

2. Drawings for the Work: The Drawing for the work can be seen in the office of the Dy.CSTE/Projects/SBC and / or CSTE/Projects/SBC, South Western Railway at any time during the office hours. The drawings are only for the guidance of Tenderer(s). Detailed working drawings (if required) based generally on the drawing mentioned above, will be given by the Engineer or his representative from time to time.

3. The Tenderer(s) shall quote his / their rates as a percentage above or below the Standard Schedule of Rates (SSOR) of South Western Railway as applicable to Project/SBC Unit except where he/they are required to quote item rates and must tender for all the items shown in the Bill(s) of Quantities attached. The quantities shown in the attached Bill(s) of Quantities are given as a guide and are approximate only and are subject to variation according to the needs of the Railway. The Railway does not guarantee work under each item of the Bill(s) of Quantities. The tenderer(s) shall quote rates / rebates only at specified place in Tender Form supplied by Railway. Any revision of rates / rebates submitted (quoted) through a separate letter whether enclosed with the bid (Tender Form) or submitted separately or mentioned elsewhere in the document other than specified place shall be summarily ignored and will not be considered.

4. Tenders containing erasures and / or alterations of tender documents are liable to be rejected. Any correction made by tender(s) in his/their entries must be attested by him / them.

5. The works are required to be completed within a period of _____ months from the date of issue of acceptance letter.

6. Bid Security:

- (a) Subject to exemptions provided under para 5(1) (a) of Part-1 (ITT) of this document, the tender must be accompanied by a Bid Security as mentioned in tender documents, failing which the tender shall be summarily rejected.
- (b) The Tenderer(s) shall keep the offer open for a minimum period of 60 days (in case of two packet system of tendering 90days) from the date of closing of the Tender. It is understood that the tender documents have been issued to the Tenderer(s) and the Tenderer(s), is / are permitted to tender in consideration of the stipulation on his / their part 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 resale from his offer or modify the terms and conditions thereof in a manner not acceptable to South Western Railway. Should the tenderer fail to observe or comply with the foregoing stipulation, the amount deposited or Bank guarantee bond submitted as Bid Security for the due performance of the above stipulation, shall be forfeited to the Railway.
- (c) If his tender is accepted,
- (i) the Bid Security mentioned in sub para(a) above deposited in cash through e-payment gateway will be retained as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract;
 - (ii) the Bid Security mentioned in sub para(a) above submitted as Bank guarantee bond, will be encashed as part security for the due and faithful fulfillment of the contract in terms of Clause 16 of the Standard General Conditions of Contract.

The Bid Security of other Tenderers shall, save as herein before provided, be returned to them, but the Railway shall not be responsible for any loss or depreciation to the Bid Security that may happen thereto while in their possession, nor be liable to pay interest thereon.

- (d) In case Contractor submits the Term Deposit Receipt/Bank Guarantee Bond towards either the Full Security Depositor the Part Security Deposit equal to or more than Bid Security, the Railway shall return the Bid Security so retained as per sub para(c) above, to the Contractor.

7. Rights of the Railway to deal with Tender: 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.

8. 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.

9. If any partner(s) of a partnership firm expires after the submission of its tender or after the acceptance of its tender, the Railway shall deem such tender as cancelled/contract as terminated under clause 61 of the Standard General Conditions of Contract, unless the firm retains its character as per partnership agreement. If a sole proprietor expires after the submission of tender or after the acceptance of tender, the Railway shall deem such tender as cancelled / contract as terminated under

clause 61 of the Standard General Conditions of Contract.

10. Eligibility Criteria:

10.1 Technical Eligibility Criteria:

(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:

- (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.

Definition of Similar Nature of Work:

(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 fulfillment 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 fulfill 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.

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.

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.

10.3 Bid Capacity: The tender/technical bid will be evaluated based on bid capacity formula detailed as Annexure-VI.

10.4 No Technical and Financial credentials are required for tenders having advertised value up to Rs. 50 lakh.

10.5 Credentials if submitted in foreign currency shall be converted into Indian currency i.e., Indian Rupee as under:

The conversion rate of US Dollars into Rupees shall be the daily representative exchange rates published by the Reserve Bank of India or entity authorized by RBI to do so for the relevant date or immediately previous date for which rates have been published. Where, relevant date shall be as on the last day of month previous to the one in which tender is invited. In case of any other currency, the same shall first be converted to US Dollars as on the last day of month previous to the one in which tender is invited, and the amount so derived in US Dollars shall be converted into Rupees at the aforesaid rate. The conversion rate of such currencies shall be the daily representative exchange rates published by the International Monetary Fund for the relevant date or immediately previous date for which rates have been published.

[Explanation for Para 10 of the Tender Form (Second Sheet) including Para 10.1 to 10.5 - Eligibility Criteria:

- 16. Substantially Completed Work means an ongoing work in which payment equal to or more than 90% of the present contract value (excluding the payment made for adjustment of Price variation (PVC), if any) has been made to the contractor in that ongoing contract and no proceedings of termination of contract on Contractor's default has been initiated. The credential certificate in this regard should have been issued not prior to 60 days of date of invitation of present tender.*
- 17. 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 fulfillment of credentials.*
- 18. 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 fulfillment of credentials*
- 19. In case of completed work, the value of final bill (gross amount) including the PVC amount (if paid) shall be considered as the completion cost of work. In case final bill is pending, only the total gross amount already paid including the PVC amount (if paid) shall be considered as the completion cost of work.*

In case of substantially completed work, the total gross amount already paid including the PVC amount (if paid), as mentioned in the certificate, shall be considered as the cost of substantially completed work.
- 20. If a bidder has successfully completed a work as subcontractor and the work experience certificate has been issued for such work to the subcontractor by a Govt. Organization or public listed company as defined in Note for Item 10.1 Para 10 of the Tender Form (Second Sheet), the same shall be considered for the purpose of fulfillment of credentials.*
- 21. In case a work is considered similar in nature for fulfillment of technical credentials, the overall cost including the PVC amount (if paid) of that completed work or substantially completed work, shall be*

considered and no separate evaluation for each component of that work shall be made to decide eligibility.

22. 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.
23. 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 crore; 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.
24. In case of existing partnership firm if any new partner(s) joins the firm without any modification in the name and PAN/TAN no. of 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.
25. 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.
26. 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.
27. 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.
28. 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.

29. In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.

30. In case company A is merged with company B, then company B would get the credentials of company A also.]

11. Tenderer Credentials:

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 South Western 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) Audited Balance Sheet duly certified by the Chartered Accountant 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 Annexure-V. In addition to Annexure-V, in case of other than Company/Proprietary firm, Annexure –V(A) shall also be submitted by the each member of a Partnership Firm / Joint Venture (JV) / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) etc. as the case may be. Non submission of a copy of certificate by the bidder shall result in summarily rejection of his/their bid. It shall be mandatorily incumbent upon the tenderer to identify, state and submit the supporting documents duly self attested / digitally signed 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 upto 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 upto two ~~five~~ years.

12. Non-compliance with any of the conditions set forth therein above is liable to result in the tender being rejected.

13. Execution of Contract Documents: The successful Tenderer(s) shall be required to execute an agreement with the President of India acting through the Dy.CSTE/Projects, Bengaluru, South Western Railway for carrying out the work according to the Standard General Conditions of Contract, Special Conditions / Specifications annexed to the tender and Standard Specifications (Works and Materials) of Railway as amended/corrected upto latest correction slips, mentioned in tender form (First Sheet).

14. 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 / Hindu Undivided Family (HUF) / Limited Liability Partnership (LLP) 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) All documents in terms of Para 10 of the Tender Form (Second Sheet) above.

(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) All other documents in terms of Para 10 of the Tender Form (Second Sheet) above.

(c) Partnership Firm:

(i) All documents as mentioned in para18 of the Tender Form (Second Sheet).

(d) Joint Venture (JV): All documents as mentioned in para 17 of the Tender Form (Second Sheet).

(e) Company registered under Companies Act2013:

(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) All other documents in terms Para 10 of the Tender Form (Second Sheet) above.

(f) LLP (Limited Liability Partnership):

- (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 by all partners of the LLP that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP or JV in which they were / are partners/members. Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the Standard General Conditions of Contract.
- (v) All other documents in terms of Para 10 of the Tender Form (Second Sheet).

(g) Registered Society & Registered Trust:

- (i) A copy of Certificate of Registration
- (ii) A copy of Memorandum of Association of Society/Trust Deed
- (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) A copy of Rules & Regulations of the Society
- (v) All other documents in terms of Para 10 of the Tender Form (Second Sheet) above.

(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/LLP 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 shall be considered only where permissible as per the tender conditions.

(vi) The Railway will not be bound by any change of power of attorney or 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.

15. The tenderer whether sole proprietor / a company or a partnership firm / ~~joint venture (JV)~~ / registered society / registered trust / HUF / LLP 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 sign the tender, submit the tender and further to deal with the Tender/ Contract up to the stage of signing the agreement except in case where such specific person is authorized for above purposes through a provision made in the partnership deed / Memorandum of Understanding / Article of Association /Board resolution, failing

which tender shall be summarily rejected.

A separate 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, shall be submitted after award of work, specifically authorizing him/them to deal with all other contractual activities subsequent to signing of agreement, if required.

Note: A Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Apostille certificate.

16. Employment/Partnership etc. of Retired Railway Employees:

(a) Should a tenderer

i) be a retired Engineer of the gazetted rank or any other gazetted officer working before his retirement, whether in the executive or administrative capacity or whether holding a pensionable post or not, in the Engineering or any other department of any of the railways owned and administered by the President of India for the time being, OR

ii) being partnership firm / joint venture (JV) / registered society / registered trust etc have as one of its partners/members a retired Engineer of the gazetted rank or any other gazetted officer working before his retirement, OR

iii) being an incorporated company have any such retired Engineer of the gazetted rank or any other gazetted officer working before his retirement as one of its directors

AND

in case where such Engineer or officer had not retired from government service at least 1 year prior to the date of submission of the tender

THEN

the tenderer will give full information as to the date of retirement of such Engineer or gazetted officer from the said service and as to whether permission for taking such contract, or if the Contractor be a partnership firm or an incorporated company, to become a partner or director as the case may be, has been obtained by the tenderer or the Engineer or officer, as the case may be from the President of India or any officer, duly authorized by him in this behalf, shall be clearly stated in writing at the time of submitting the tender.

b) In case, upon successful award of contract, should a tenderer depute for execution of the works under or to deal matters related with this contract, any retired Engineer of gazette rank or retired gazetted officer working before his retirement in the Engineering or any other department of any of the railways owned and administered by the President of India for the time being, and now in his employment, then the tenderer will ensure that retired Engineer or retired gazetted officer had retired from government service at least 1 year prior to the date of his

employment with tenderer and in case he had retired from service within a year then he possesses the requisite permission from the President of India or any officer, duly authorized by him in this behalf, to get associated with the tenderer.

- c) Should a tenderer or Contractor being an individual, have member(s) of his family or in the case of partnership firm/ company / joint venture (JV) / registered society / registered trust etc. one or more of his partner(s)/shareholder(s) or member(s) of the family of partner(s)/shareholder(s) having share of more than 1% in the tendering entity employed in gazetted capacity in the Engineering or any other department of the railway, then the tenderer at the time of submission of tender, will inform the authority inviting tenders the details of such persons.

Note: -If information as required as per 16.a), b), c) above has not been furnished, contract is liable to be dealt in accordance with provision of clause 62 of the Standard General Condition of contract.

JOINT VENTURE (JV) IN WORKS TENDERS

17. Participation of Joint Venture (JV) in Works Tender: This para shall be applicable for works tenders wherein tender documents provide for the same.

17.1 Separate identity/name shall be given to the Joint Venture.

17.2 Number of members in a JV shall not be more than three, if the work involves only one department (say Civil or S&T or Electrical or Mechanical) and shall not be more than five, if the work involves more than one Department. One of the members of the JV shall be its Lead Member who shall have a majority (at least 51%) share of interest in the JV. The other members shall have a share of not less than 20% each in case of JV with upto three members and not less than 10% each in case of JV with more than three members. In case of JV with foreign member(s), the Lead Member has to be an Indian firm/company with a minimum share of 51%.

17.3 A member of JV shall not be permitted to participate either in individual capacity or as a member of another JV in the same tender.

17.4 The tender form shall be purchased and submitted only in the name of the JV and not in the name of any constituent member. The tender form can however be submitted by JV or any of its constituent member or any person authorized by JV through Power of Attorney to submit tender.

17.5 Bid Security shall be submitted by JV or authorized person of JV either as :

- (i) Cash through e-payment gateway or as mentioned in tender document, or
- (ii) Bank Guarantee bond either in the name of JV, or in the name of all members of JV as per MOU irrespective of their share in the JV if the JV has not been constituted legally till the date of submission of tender.

17.6 A copy of Memorandum of Understanding (MoU) duly executed by the JV members on a stamp paper, shall be submitted by the JV alongwith the tender. The complete details of the members of the JV, their share and responsibility in the JV etc. particularly with reference to financial, technical and other

obligations shall be furnished in the MoU.

17.7 Once the tender is submitted, the MoU shall not normally be modified / altered / terminated during the validity of the tender. In case the tenderer fails to observe/comply with this stipulation, the full Bid Security shall be liable to be forfeited.

17.8 Approval for change of constitution of JV shall be at the sole discretion of the Railway. The constitution of the JV shall not normally be allowed to be modified after submission of the bid by the JV, except when modification becomes inevitable due to succession laws etc., provided further that there is no change in qualification of minimum eligibility criteria by JV after change of composition. However, the Lead Member shall continue to be the Lead Member of the JV. Failure to observe this requirement would render the offer invalid.

17.9 Similarly, after the contract is awarded, the constitution of JV shall not be normally allowed to be altered during the currency of contract except when modification become inevitable due to succession laws etc. and minimum eligibility criteria should not get vitiated. Failure to observe this stipulation shall be deemed to be breach of contract with all consequential penal action as per contract conditions.

17.10 On award of contract to a JV, a single Performance Guarantee shall be submitted by the JV as per tender conditions. All the Guarantees like Performance Guarantee, Bank Guarantee for Mobilization Advance, Machinery Advance etc. shall be accepted only in the name of the JV and no splitting of guarantees amongst the members of the JV shall be permitted.

17.11 On issue of LOA (Letter of Acceptance), the JV entity to whom the work has been awarded, with the same shareholding pattern as was declared in the MOU/JV Agreement submitted alongwith the tender, shall be got registered before the Registrar of the Companies under 'The Companies Act -2013' (in case JV entity is to be registered as Company) or before the Registrar/Sub-Registrar under the 'The Indian Partnership Act, 1932' (in case JV entity is to be registered as Partnership Firm) or under 'The LLP Act 2008' (in case JV entity is to be registered as LLP). A separate PAN shall be obtained for this entity. The documents pertaining to this entity including its PAN shall be furnished to the Railways before signing the contract agreement for the work. In case the tenderer fails to observe/comply with this stipulation within 60 days of issue of LOA, contract is liable to be terminated. In case contract is terminated railway shall be entitled to forfeit the full amount of the Bid Security and other dues payable to the Contractor under this contract. The entity so registered, in the registered documents, shall have, inter-alia, following Clauses:

17.11.1 Joint and Several Liability - Members of the entity to which the contract is awarded, shall be jointly and severally liable to the Railway for execution of the project in accordance with General and Special Conditions of Contract. The members of the entity shall also be liable jointly and severally for the loss, damages caused to the Railways during the course of execution of the contract or due to non-execution of the contract or part thereof.

17.11.2 Duration of the Registered Entity - It shall be valid during the entire currency of the contract including the period of extension, if any and the maintenance period after the work is completed.

17.11.3 Governing Laws - The Registered Entity shall in all respect be governed by and interpreted in accordance with Indian Laws.

17.12 Authorized Member - Joint Venture members in the JV MoU shall authorize Lead member on behalf of the Joint Venture to deal with the ~~tender~~Contract, sign the agreement or enter into contract in respect of the said tender, to receive payment, to witness joint measurement of work done, to sign measurement books and similar such action in respect of the said tender/contract. All notices/correspondences with respect to the contract would be sent only to this authorized member of the JV.

17.13 No member of the Joint Venture shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other members and that of the Railway in respect of the said tender/contract.

17.14 Documents to be enclosed by the JV along with the tender:

17.14.1 In case one or more of the members of the JV is/are partnership firm(s), following documents shall be submitted:

- (i) A notarized copy of the Partnership Deed or a copy of the Partnership deed registered with the Registrar.
- (ii) A copy of consent of all the partners or individual authorized by partnership firm, to enter into the Joint Venture Agreement on a stamp paper,
- (iii) A notarized or registered copy of Power of Attorney in favour of the individual to sign the MOU/JV Agreement on behalf of the partnership firm and create liability against the firm.
- (iv) An undertaking by all partners of the partnership firm that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP in which they were / are partners/members. Any Concealment / wrong information in regard to above shall make the bid ineligible or the contract shall be determined under Clause 62 of the Standard General Conditions of Contract.

17.14.2 In case one or more members is/are Proprietary Firm or HUF, the following documents shall be enclosed:

- (i) A copy of notarized affidavit on Stamp Paper declaring that his Concern is a proprietary Concern and he is sole proprietor of the Concern OR he who is signing the affidavit 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.

17.14.3 In case one or more members of the JV is/are companies, the following documents shall be submitted:

- (i) A copy of resolutions of the Directors of the Company, permitting the company to enter into a JV agreement,
- (ii) The copies of MOA (Memorandum of Association) / AOA (Articles of Association) of the company
- (iii) A copy of Certificate of Incorporation
- (iv) A copy of Authorization/copy of Power of Attorney issued by the Company (backed by the resolution of Board of Directors) in favour of the individual, to sign the tender, sign MOU/JV

Agreement on behalf of the company and create liability against the company

17.14.4 In case one or more members of the JV is/are LLP firm/s, the following documents shall be submitted:

- (i) A copy of LLP Agreement
- (ii) A copy of Certificate of Incorporation of LLP
- (iii) A copy of resolution passed by partners of LLP firm, permitting the Firm to enter into a JV agreement
- (iv) A copy of Authorization /copy of Power of Attorney issued by the LLP firm (backed by resolution passed by the Partners) in favour of the individual, to sign the tender and/or sign the MOU/ JV agreement on behalf of the LLP and create liability against the LLP.
- (v) An undertaking by all partners of the LLP that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP or JV in which they were / are partners/members. Any Concealment / wrong information in regard to above shall make the contract liable for determination under Clause 62 of the Standard General Conditions of Contract.

17.14.5 In case one or more members of the JV is/are Society/s or Trust/s, the following documents shall be submitted:

- (i) A copy of Certificate of Registration
- (ii) A copy of Memorandum of Association of Society/Trust Deed
- (iii) A copy of Rules & Regulations of the Society
- (iv) A copy of Power of Attorney, in favour of the individual to sign the tender documents and create liability against the Society/Trust.

17.14.6 All other documents in terms of Para 10 of the Tender Form (Second Sheet) above.

17.14.7 A Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed the Hague Legislation Convention 1961 are not required to be legalized by the Indian Embassy if it carries a conforming Apostille certificate.

17.15 Credentials & Qualifying Criteria: Technical, financial eligibility and Bid capacity of the JV shall be adjudged based on satisfactory fulfillment of the following criteria:

17.15.1 Technical Eligibility Criteria ('a' or 'b' mentioned hereunder):

(a) For Works without composite components

The technical eligibility for the work as per para 10.1 above, shall be satisfied by either the 'JV in its own name & style' or 'Lead member of the JV'.

Each other (non-lead) member(s) of JV, who is/ are not satisfying the technical eligibility for the work as per para 10.1 above, shall have technical capacity of minimum ~~25%~~ 10% of the cost of work i.e.,

each non-lead member of JV member must have satisfactorily completed or substantially completed during the last 07 (seven) years, ending last day of month previous to the one in which tender is invited, one similar single work for a minimum of ~~25%~~ 10% of advertised value of the tender.

(b) For works with composite components

The technical eligibility for major component of work as per para 10.1 above, shall be satisfied by either the 'JV in its own name & style' or 'Lead member of the JV' and technical eligibility for other component(s) of work as per para 10.1 above, shall be satisfied by either the 'JV in its own name & style' or 'any member of the JV'.

Each other (non-lead)member(s) of JV, who is/ are not satisfying the technical eligibility for any component of the work as per para 10.1 above, shall have technical capacity of minimum ~~25%~~ 10% of the cost of any component of work mentioned in technical eligibility criteria. i.e., each other (non-lead) member of must have satisfactorily completed or substantially completed during the last 07 (seven) years, ending last day of month previous to the one in which tender is invited, one similar single work for a minimum of ~~25%~~ 10% of cost of any component of work mentioned in technical eligibility criteria.

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Note for Para 17.15.1:

a) *The Major component of the work for this purpose shall be the component of work having highest value. In cases where value of two or more component of work is same, any one work can be classified as Major component of work.*

b) *Value of a completed work done by a Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying his/her compliance to the above mentioned technical eligibility criteria in the tender under consideration.*

17.15.2 Financial Eligibility Criteria

The JV shall satisfy the requirement of "Financial Eligibility" mentioned at para 10.2 above. The "financial capacity" of the lead member of JV shall not be less than 51% of the financial eligibility criteria mentioned at para 10.2 above.

The arithmetic sum of individual "financial capacity" of all the members shall be taken as JV's "financial capacity" to satisfy this requirement.

Note: Contractual payment received by a Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying compliance of the above mentioned financial eligibility criteria in the tender under consideration.

17.15.3 Bid Capacity

The JV shall satisfy the requirement of "Bid Capacity" requirement mentioned at para 10.3 above. The arithmetic sum of individual "Bid capacity" of all the members shall be taken as JV's "Bid capacity" to satisfy this requirement.

18. Participation of Partnership Firms in works tenders:

18.1 The Partnership Firms participating in the tender should be legally valid under the provisions of the Indian Partnership Act.

18.2 The partnership firm should have been in existence or should have been formed prior to submission of tender. Partnership firm should have either been registered with the Registrar or the partnership deed should have been notarized as per the Indian Partnership Act, prior to submission of tender.

18.3 Separate identity / name should be given to the partnership firm. The partnership firm should have PAN / TAN number in its own name and PAN / TAN number in the name of any of the constituent partners shall not be considered. The valid constituents of the firm shall be called partners.

18.4 Once the tender has been submitted, the constitution of the firm shall not normally be allowed to be modified / altered / terminated during the validity of the tender as well as the currency of the contract except when modification becomes inevitable due to succession laws etc., in which case prior permission should be taken from Railway and in any case the minimum eligibility criteria should not get vitiated. The re-constitution of firm in such cases should be followed by a notary certified Supplementary Deed. The approval for change of constitution of the firm, in any case, shall be at the sole discretion of the Railways and the tenderer shall have no claims what-so-ever. Any change in the constitution of Partnership firm after submission of tender shall be with the consent of all partners and with the signatures of all partners as that in the Partnership Deed. Failure to observe this requirement shall render the offer invalid and full Bid Security shall be forfeited.

If any Partner/s withdraws from the firm after submission of the tender and before the award of the contract, the offer shall be rejected and Bid Security of the tenderer will be forfeited. If any new partner joins the firm after submission of tender but prior to award of contract, his / her credentials shall not qualify for consideration towards eligibility criteria either individually or in proportion to his share in the previous firm. In case the tenderer fails to inform Railway beforehand about any such changes / modification in the constitution which is inevitable due to succession laws etc. and the contract is awarded to such firm, then it will be considered a breach of the contract conditions liable for determination of the contract under Clause 62 of the Standard General Conditions of Contract.

18.5 A partner of the firm shall not be permitted to participate either in his individual capacity or as a partner of any other firm in the same tender.

18.6 The tender form shall be submitted only in the name of partnership firm. The Bid Security shall be submitted by partnership firm. The Bid Security submitted in the name of any individual partner or in the name of authorized partner (s) shall not be considered.

18.7 On issue of Letter of Acceptance (LOA) to the partnership firm, all the guarantees like Performance Guarantee, Guarantee for various Advances to the Contractor shall be submitted only in the name of the partnership firm and no splitting of guarantees among the partners shall be acceptable.

18.8 On issue of Letter of Acceptance (LOA), contract agreement with partnership firm shall be executed in the name of the firm only and not in the name of any individual partner.

18.9 In case the Letter of Acceptance (LOA) is issued to a partnership firm, the following undertakings shall be furnished by all the partners through a notarized affidavit, before signing of contract agreement.

(a) Joint and several liabilities:

The partners of the firm to which the Letter of Acceptance (LOA) is issued, shall be jointly and severally liable to the Railway for execution of the contract in accordance with General and Special Conditions of the Contract. The partners shall also be liable jointly and severally for the loss, damages

caused to the Railway during the course of execution of the contract or due to non-execution of the contract or part thereof.

(b) Duration of the partnership deed and partnership firm agreement:

The partnership deed/partnership firm agreement shall normally not be modified/altered/terminated during the currency of contract and the maintenance period after the work is completed as contemplated in the conditions of the contract. Any change carried out by partners in the constitution of the firm without permission of Railway, shall constitute a breach of the contract, liable for determination of the contract under Clause 62 of the Standard General Conditions of Contract.

(c) Governing laws: The partnership firm agreement shall in all respect be governed by and interpreted in accordance with the Indian laws.

(d) No partner of the firm shall have the right to assign or transfer the interest right or liability in the contract without the written consent of the other partner/s and that of the Railway.

18.10 The tenderer shall clearly specify that the tender is submitted on behalf of a partnership firm. The following documents shall be submitted by the partnership firm, with the tender:

- (i) A notarized copy of the Partnership Deed or a copy of the Partnership deed registered with the Registrar.
- (ii) A notarized or registered copy of Power of Attorney in favour of the individual to tender for the work, sign the agreement etc. and create liability against the firm.
- (iii) An undertaking by all partners of the partnership firm that they are not blacklisted or debarred by Railways or any other Ministry / Department of the Govt. of India from participation in tenders / contracts as on the date of submission of bids, either in their individual capacity or in any firm/LLP in which they were / are partners/members. Any Concealment / wrong information in regard to above shall make the bid ineligible or the contract shall be determined under Clause 62 of the Standard General Conditions of Contract.
- (iv) All other documents in terms of Para 10 of the Tender Form (Second Sheet) above.

18.11 Evaluation of eligibility of a partnership firm:

Technical and financial eligibility of the firm shall be adjudged based on satisfactory fulfillment of the eligibility criteria laid down in Para 10 of the Tender Form (Second Sheet) above.

19.0 Advances to Contractor –

If specifically provided in Tender Documents of tender having advertised value more than Rs 50 Crores, Railway shall make payment, as an Interest bearing advances, as per Contractor's request. These advances shall carry a simple interest _____ as indicated in the Tender documents. The payment and recovery of such advances shall be made as per manners prescribed in Clause 46.4 of the Standard General Conditions of Contract.

(Signature)
(Designation)

Signature of Tenderer(s) South Western Railway Date _____
Date _____

ANNEXURE - I (Contd. ...)**TENDER FORM (Third Sheet)****Name of Work:** _____**BILL OF QUANTITIES****1. Standard Schedule of Rates (SSOR) Items:**

SL	Item No. of SSOR	Description of Item of Work	Approximate Quantity	Unit	Rates in Figures and Words to be filled by tenderer (₹)	Amount (₹)
1	2	3	4	5	6	7

2. Non Standard Schedule of Rates (SSOR) Items:

SL	Item No.	Description of Item of Work	Approximate Quantity	Unit	Rates in Figures and Words to be filled by tenderer (₹)	Amount (₹)
1	2	3	4	5	6	7

The quantities shown in above Bill of Quantities are approximate and are as a guide to give the tenderer(s) an idea of quantum of work involved. The Railway reserves the right to increase/ decrease and/or delete or include any of the quantities given above and no extra rate will be allowed on this account.

I/We undertake to do the work at _____ % above/below the Standard Schedule of Rates (SSOR) of the _____ Railway as applicable to _____ Division or at the rates quoted above for each item.

Dated _____

Signature of the Tenderer(s)

Note: Columns 1 to 5 shall be filled by the office of the Authority inviting tender. Columns 6 & 7 shall be filled by the Tenderer(s) only when percentage tenders are not invited.

TENDER FORM (Third Sheet)

Name of Work:

Summary of Schedules

S. N	Schedule	Amount(₹)
	Grand Total	

For Details of Schedule of Quantities NIT may be referred on <https://www.ireps.gov.in>.

Note:

1. The tenderer should quote their rates inclusive of all taxes.
2. The administration does not pay any tax in addition to the price quoted.
3. The quantities shown in above Bill of Quantities are approximate and are as a guide to give the tenderer(s) an idea of quantum of work involved. The Railway reserves the right to increase/ decrease and/or delete or include any of the quantities given above and no extra rate will be allowed on this account.
4. PAYMENTS TERMS: Para No. of xxx may be referred

ANNEXURE – II

AGREEMENT FOR ZONE CONTRACT

CONTRACT AGREEMENT No. _____ DATED _____. ARTICLES OF AGREEMENT made this _____ day of _____ between the President of India acting through the _____, _____ Railway hereinafter called the "Railway" of the one part and _____ hereinafter called the "Contractor" of the other part.

WHEREAS the Contractor has agreed with the Railway during the period of _____ months from _____ to _____ for the performance of:

(a) New Works, additions and alterations to existing structures, special repair works and supply of building materials subject to the contract value for such works not exceeding ₹ _____.

(b) All ordinary repair and maintenance works at any site between kilometer _____ and kilometre _____ as will be set forth in the work orders (which work orders shall be deemed and taken to be part of this contract) that will be issued during the said period at _____% above/below the Standard Schedule of Rates (SSOR) of the _____ Railway, corrected up to the latest correction slips and Standard Specifications of the _____ Railway corrected upto latest correction slips and the Special Conditions and Special Specifications, if any in conformity with the drawings (if any) that will be issued with the work order, aforesaid AND WHEREAS the performance of the said work is an act in which the public are interested.

NOW THIS INDENTURE PRESENTS WITNESSETH That in consideration of the payment to be made by the Railway, the Contractor will duly perform the works set forth in the said Work Order 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 on or before the respective dates specified therein in accordance with the said specifications and said drawings (if any) and said conditions of contract and will observe, fulfill and keep all the conditions therein mentioned, (which shall be deemed and taken to be part of this contract as if the same had been duly set forth herein), AND the Railway both here-by agree that if the Contractor shall duly perform the said work 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 completion thereof the amount due in respect thereof at the rates specified above.

Contractor _____

Designation _____

Address _____

Railway _____

(For President of India)

Witnesses (to signature of Contractor):

Signature of witnesses with address _____

Date _____

Signature of witnesses with address _____

Date _____

ANNEXURE - III

WORK ORDER UNDER ZONE CONTRACT

WORK ORDER NO. _____, DATED _____ UNDER CONTRACT AGREEMENT

NO. _____ DATED _____.

Name of Work _____ (SITE) _____

Schedule of Drawings _____

Authority _____ Allocation _____

The Contractor(s) _____ is / are hereby ordered to carry out the following works at _____% above/below the 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 under Zone Contract Agreement here-in-before referred to:

SL	Item No.	Description of Item of Work	Approximate Quantity	Unit	Rates in Figures and Words (₹)	Amount (₹)
1	2	3	4	5	6	7
Total Approximate Value of Work = ₹ _____						

The works herein mentioned are required to be completed on or before _____ (Date). The quantities provided herein are approximate and subject to variation under Clause 42 of the Standard General Conditions of Contract updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents.

Divisional Railway Manager/Divisional _____ Engineer

_____ Division

_____ Railway

Date _____

for President of India

I agree to complete the works herein set forth on or before the date specified under the Zone Contract Agreement herein before referred to in conformity with the drawings hereto annexed and in accordance with the General and Special (if any) Conditions of Contract updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the Standard Specifications of _____ Railway updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents .

I also agree to maintain such works for the period specified below from the date of completion:

(a) Repair and maintenance work including white/color washing: three calendar months from date of completion.

(b) All new works except earth work: Six calendar months from date of completion.

Contractor _____ (Signature)

Railway: Designation _____

Address _____

For President of India)

Date _____

Date _____

Signature of Witnesses (to Signature of Contractor) with address

1. _____

2. _____

ANNEXURE - IV

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 Bill(s) of Quantities hereto annexed upon the Standard General Conditions of Contract, updated with correction slips issued up to date of inviting tender or as otherwise specified in the tender documents and the Specifications of _____ 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 WITNESSETH that in consideration to the payments to be made by the Railways, the Contractors will duly perform the said works in the said 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, fulfill 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 Bill(s) of Quantities hereto annexed.

Contractor _____ (Signature) Railway: Designation _____

Address _____ (For President of India)

Date _____

Date _____

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

Witnesses:

ANNEXURE-V

Reference -Para 6.1 of ITT

FORMAT FOR CERTIFICATE TO BE SUBMITTED / UPLOADED BY TENDERER ALONGWITH 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. In case 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 ~~affidavit~~ **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~~ **and may also lead to any other action provided in the contract including** banning of business for a period of upto ~~five~~ **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 ~~affidavit~~ **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~~ **and may also lead to** any other action provided in the contract including banning of business for a period of upto ~~five~~ **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 certificate is to be given by each member of JV or Partners of Partnership firm/LLP/etc.~~

ACS-1, 14.07.2022

ACS-2, 13.12.2022

ACS-3

ACS-4

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:

ACS-2, 13.12.2022

ANNEXURE – VI

Reference -Para 10.3 & 17.15.3 of Tender Form (Second Sheet) of Annexure I of ITT

TENDERER'S CREDENTIALS (BID CAPACITY)

_____ **RAILWAY**

For tenders having advertised value more than Rs 20 crore wherein eligibility criteria includes bid capacity also, the tenderer will be qualified only if its available bid capacity is equal to or more than the total bid value of the present tender. The available bid capacity shall be calculated as under:

Available Bid Capacity = $[A \times N \times 2] - 0.33 \times N \times B$

Where,

A = Maximum value of construction works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender), taking into account the completed as well as works in progress.

N= Number of years prescribed for completion of work for which bids has been invited.

B = Existing commitments and balance amount of ongoing works with tenderer as per the prescribed proforma of Railway for statement of all works in progress and also the works which are awarded to tenderer but yet not started upto the date of inviting of tender.

ACS-1 14.07.2022

Note:

- (a) The Tenderer(s) shall furnish the details of -
 - (i) Maximum value of construction works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender) for calculating A, and
 - (ii) Existing commitments and balance amount of ongoing works with tenderer as per the prescribed proforma of Railway for statement of all works in progress and also the works which are awarded to tenderer but yet not started upto the date of inviting of tender for calculating B. In case of no works in hand, a 'NIL' statement should be furnished.
The submitted details for (i) and (ii) above should be duly verified by Chartered Accountant.
- (b) In case if a bidder is JV, the tenderer(s) must furnish the details of
 - (i) Maximum value of construction works executed and payment received in any one of the previous three financial years or the current financial year (up to date of inviting tender) by each member of JV for calculating A, and
 - (ii) Existing commitments and balance amount of ongoing works with each member of JV either in individual capacity or as a member of other JV as per the prescribed proforma of Railway for statement of all works in progress and also the works which are awarded to each member of JV either in individual capacity or as a member of other JV but yet

not started upto the date of inviting of tender for calculating B. In case of no works in hand, a 'NIL' statement should be furnished.

The submitted details for (i) and (ii) above should be duly verified by Chartered Accountant.

- (c) Value of a completed work/work in progress/work awarded but yet not started for a Member in an earlier JV shall be reckoned only to the extent of the concerned member's share in that JV for the purpose of satisfying his/her compliance to the above mentioned bid capacity in the tender under consideration.
- (d) The arithmetic sum of individual "bid capacity" of all the members shall be taken as JV's "bid capacity".
- (e) In case, the tenderer/s failed to submit the above statement along with offer, their/his offer shall be considered as incomplete and will be rejected **summarily**.
- (f) The available bid capacity of tenderer shall be assessed based on the details submitted by the tenderer. In case, the available bid capacity is lesser than estimated cost of work put to tender, his offer shall not be considered even if he has been found eligible in other eligibility criteria/tender requirement.

Annexure –VIA

Para 5 of the Instructions to Tenderers

(Bid Security)

Bank Guarantee Bond from any scheduled commercial bank of India

(On non-judicial stamp paper, which should be in the name of the Executing Bank).

Name of the Bank: -----

President of India,

Acting through : Dy.CSTE/Projctcs/SBC

South Western Railway,

Beneficiary: FINANCIAL ADVISOR AND CHIEF ACCOUNTS OFFICER CONSTRUCTION, SOUTH WESTERN RAILWAY, BENGALORE CANTONMENT-560046, South Western Railway

Date:.....

Bank Guarantee Bond No.:

Date:-----

In consideration of the President of India acting through DyCSTE/Projects/SBC, South Western Railway,, (hereinafter called "The Railway") having invited the bid

for _____ through Notice inviting tender (NIT) No.. _____, We have been informed that ***[Insert name of the Bidder]***..... **(hereinafter called "the Bidder")** intends to submit its bid (hereinafter called "the Bid").

WHEREAS, the Bidder is required to furnish Bid Security for the sum of ***[Insert required Value of Bid Security]***, in the form of Bank Guarantee, according to conditions of Bid.

AND

WHEREAS,***[Insert Name of the Bank]***, with its Branch***[Insert Address]*** having its Headquarters office at..... ***[Insert Address]***, hereinafter called the **Bank**, acting through***[Insert Name and Designation of the authorised persons of the Bank]***, have, at the request of the Bidder, agreed to give guarantee for Bid Security as hereinafter contained, in favour of the Railway:

1. KNOW ALL MEN that by these present that I/We the undersigned ***[Insert name(s) of authorized representatives of the Bank]***, being fully authorized to sign and incur obligations for and on behalf of the Bank, confirm that the Bank, hereby, unconditionally and irrevocably guarantee to pay to the Railway full amount in the sum of ***[Insert required Value of Bid Security]*** as above stated.
2. The Bank undertakes to immediately pay on presentation of demand by the Railway any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the Railway on the Bank shall be final, conclusive and binding, absolute and unequivocal on the Bank notwithstanding any disputes raised/ pending before any Court, Tribunal, Arbitration or any Authority or any threatened litigation by the Bidder or Bank.
3. The Bank shall pay the amount as demanded immediately on presentation of the demand by Railway without any reference to the Bidder and without the Railway being required to show grounds or give reasons for its demand of the amount so demanded.
4. The guarantee hereinbefore shall not be affected by any change in the constitution of the Bank or in the constitution of the Bidder.

5. The Bank agrees that no change, addition, modifications to the terms of the Bid document or to any documents, which have been or may be made between the Railway and the Bidder, will in any way absolve the Bank from the liability under this guarantee; and the Bank, hereby, waives any requirement for notice of any such change, addition or modification made by Railway at any time.
6. This guarantee will remain valid and effective from.....***[insert date of issue]***till***[insert date, which should be minimum 90 days beyond the expiry of validity of Bid]***. Any demand in respect of this Guarantee should reach the Bank within the validity period of Bid Security.
7. The Bank Guarantee is unconditional and irrevocable.
8. The expressions Bank and Railway herein before used shall include their respective successors and assigns.
9. The Bank hereby undertakes not to revoke the guarantee during its currency, except with the previous consent in writing of the Railway. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No.758.
10. The Bank hereby confirms that it is on the SFMS (Structured Financial Messaging System) and shall invariably send the advice of this Bank Guarantee to the following bank details –

IFSC CODE	SBIN000RAIL
IFSC TYPE	BRANCH
BANK NAME	STATE BANK OF INDIA
BRANCH NAME	RAIL
CITY NAME	NAVI MUMBAI
ADDRESS	SECTOR-11, CBD BELAPUR, NAVI MUMBAI
DISTRICT	NAVI MUMBAI
STATE	MAHARASHTRA
BG ENABLED	YES

11. The Guarantee shall be valid in addition to and without prejudice to any other security Guarantee(s) of Bidder in favour of the Railway. The Bank, under this Guarantee, shall be deemed as Principal Debtor of the Railway.

Date

.....

Place.....

Bank's Seal and authorized signature(s)
[Name in Block letters]
[Designation with Code No.].....

[P/Attorney] No.

Witness:

- 1 Signature, Name & Address & Seal
- 2 Signature, Name& address & Seal

Bank's Seal

[P/Attorney]No.

Note: All italicized text is for guidance on how to prepare this bank guarantee and shall be deleted from the final document.

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)

Proformas and Formats

PROFORMA - 1

No.

Office of the

Date:

EXPERIENCE CERTIFICATE

To whom so ever it may concern

(Issued for the purpose of quoting in SWR Project tenders)

M/s/Sri..... (Name and address of the contractor) is a working contractor of this unit and was **awarded the following work. The relevant details of the work are as under: -**

SN	Description	Details
1.	Name of Work	
2.	Acceptance Letter No. and Date	
3.	Agreement Number, date and name of the agency	
4.	Agreement Value in Rupees (in words and figures)	
4(a)	In case of JV..... Name and % share of individual firms.	
5.	Due date of completion	
6.	Actual date of completion of work	
7.	Value of Final Bill if passed (in words)	
8.	Work completed but Final measurements not recorded: Amount paid so far as in CC bill No.	
9.	Work completed. Final measurements recorded with negativevariation: Amount so far paid as in CC bill No.	
10.	Work completed. If Final measurements recorded with Positivevariation which is not sanctioned yet: Original agreement value or last sanctioned agreement value whichever is lower.	
11.	Scope of work (Broad category of works i.e., the name of thework in the agreement on which work is completed)	
12.	Details of values of major components/ works executed in thecompleted work.	

Note:

The Certificate to satisfy similar work should be signed by an officer not lower than JAG officer in Railways and Executive Engineer rank or equivalent grade in other department of Govt. of India/State Government/ PSUs of Government of India / State Undertaking and Competent Authority of Public Listed Company.

Signature:

.....
.....
.....
.....

Name of Officer:

Designation:

Address:

Office Seal:

Phone/Fax No:

Date:

PROFORMA – 1A**DETAILS OF WORKS COMPLETED DURING THE LAST SEVEN FINANCIAL YEARS TO ADJUDGE TECHNICAL ELIGIBILITY****LIST OF WORKS COMPLETE in last 07 (seven) years, ending last day of month previous to the one in which tender is invited**

Sr . N o.	Name of work	Name of Organiza tion for whom executed and Contract awarding authority	Contra ct agree ment No and Date of Award	Approx. Value of Contract		Date of Commenceme nt	
				Agreeme nt Value	Final Value	Schedul ed	Actual
1	2	3	4	5	6	7	8

Date of Finish		Period of Completion		Main features of the work	Remarks
Scheduled	Actual	Scheduled	Actual		
9	10	11	12	13	14

Note:

- Only the documents which are declared explicitly in the above table by the tenderer as “documents supporting the claim of qualifying the laid down eligibility criteria” will be considered for evaluating the tender.
- Supporting documents / certificates (duly attested) from the organisation with whom worked or working should be enclosed.

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

PROFORMA – 4

e-Tender Notice No.:

Name of Work:

PARTICULARS OF TENDER(S)

1. Full name of Contractor /
Construction firm
2. Year of Establishment of Firm
3. Registered head office Address
Telephone no, Fax no,
E-mail address
4. Branch office Address, Telephone no,
Fax no, E-mail address
5. Details of Constitution of firm,
Names of Partners/ Executive/
Power of Attorney holders, etc.
6. Particulars of Registration with Government
Semi-Govt. Organisation, Public Sector
Undertaking & Local Bodies etc.

**PROFORMA – 5
ENGINEERING ORGANISATION**

1. ENGINEERING ORGANIZATION AVAILABLE ON HAND

Sl. No	Name & Designation of Employee	Qualification	Previous Experience	Working From To
01.	02.	03.	04.	05.
A				
B				
C				
Z				

2. ENGINEERING ORGANIZATION PROPOSED TO BE ENGAGED FOR THIS WORK FROM ABOVE.

Sl.No	Name & Designation of Employee	Qualification	Previous Experience	Remarks
01.	02.	03.	04.	05.
A				
B				
C				
Z				

3. ENGINEERING ORGANIZATION PROPOSED TO BE ENGAGED FOR THIS WORK FROM OUTSIDE. (A SUITABLY WORDED CONSENT LETTER FROM SUCH A PERSON SHOULD BE

OBTAINED AND ENCLOSED)

Sl.No	Name & Designation of Employee	Qualification	Previous Experience	Remarks
01.	02.	03.	04.	05.
A				
B				
C				
Z				

SIGNATURE OF THE TENDERER(S): NAME OF THE TENDERER (S):

PROFORMA – 6

EQUIPMENT

1. EQUIPMENT AVAILABLE ON HAND:

Sl.No	Particulars of machinery, Plant & equipment	No. of Units	Kind and make	Capacity	Age and Condition	Approx. cost in Rs. In Lakhs	Purchase Bill No. & Date and Registration particulars
01.	02.	03.	04.	05.	06.	07.	08.
A.							
B.							
C.							
Z.							

2. EQUIPMENT PROPOSED TO BE INDUCTED FROM ABOVE.

Sl.No	Particulars of machinery, Plant & equipment	No. of Units	Kind and make	Capacity	Age and Condition	Approx. cost in Rs. In Lakhs	Purchase Bill No. & Date and Registration particulars
01.	02.	03.	04.	05.	06.	07.	08.
A.							
B.							
C.							
Z.							

3. EQUIPMENT PROPOSED TO BE INDUCTED FROM OUTSIDE.

Sl.No	Particulars of machinery, Plant & equipment	No. of Units	Kind and make	Capacity	Age and Condition	Approx. cost in Rs. In Lakhs	Purchase Bill No. & Date and Registration particulars
01.	02.	03.	04.	05.	06.	07.	08.
A.							
B.							
C.							
Z.							

SIGNATURE OF THE TENDERER (S): NAME OF THE TENDERER (S):

PROFORMA- 7

FORM OF BANK GUARANTEE BOND (PROFORMA FOR PERFORMANCE BANK GUARANTEE) *

BANK GUARANTEE No. _____ AMOUNT Rs. _____ VALIDITY
FROM. _ _ VALID UPTO. _ _ LAST DATE FOR LODGEMENT OF
CLAIMS

PERFORMANCE GUARANTEE IN THE FORM OF BANK GUARANTEE

1. In consideration of President of India acting through the FINANCIAL ADVISOR AND CHIEF ACCOUNTS OFFICER CONSTRUCTION, SOUTH WESTERN RAILWAY, BENGALORE CANTONMENT-560046., (herein after referred to as the Government) having accepted vide

1. _____ letter No. _____ dated _____, the tender submitted by * (give full address of the Contractor) * (hereinafter referred to as "the Contractor(s), and agreed to grant a contract for

***(indicate the nature of the contract works) * (herein after called the contract) whereas one of the terms agreed by the said Contractor, is that, he should give a Performance Guarantee in the form of an irrevocable bank guarantee amounting to 5% of the contract value, i.e. Rs.**

(Rupees only) valid up to expiry of the maintenance period, i.e. Up to

,*(indicate dated)* by way of Security for the due observance of the terms and conditions, performance and fulfilment of the said contract, we (indicate the name and full address of the bank) (herein after referred to as "the Bank') at the request of the Contractor do hereby irrevocably and unconditionally guarantee to the Government that the contractor shall duly perform and discharge their obligations under the said contract to the full satisfaction of the Government and render all necessary and efficient services which may be required to be rendered by the Contractor in connection with and/or for the performance of the works as per the specifications stipulated in the tender No.

Dated and letter of acceptance No. dated _____, within the time of (up to the expiry of maintenance period) reckoned from the date as per the letter of acceptance and further guarantees that the works which shall be done by the contractor under the said contract, shall be actually performed in accordance with terms and conditions of the contract to the full satisfaction of the Government.

2. We, the Bank do hereby undertake to pay to the Government an amount not exceeding Rs. _____ against any loss and / or damage caused to or suffered or would be caused to or suffered by the Government by reasons of any breach by the said contractor (s) of any of the terms and conditions contained in the said contract.

3. **We, the Bank, do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on a demand from the Government stating that the amount claimed is due by way of loss and / or damage caused to 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 or by reason of the Contractor's (s) failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regard the amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs. .**
4. We, the Bank, do hereby undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding pending before any Court, Tribunal or Arbitrator (s) relating thereto out 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) shall have no claim against us for making such payment.
5. **We, the Bank , do further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till the Government certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges the Guarantee. Unless a demand or claim under this Guarantee is made on us in writing on or before the, we shall be discharged from all liability under this Guarantee thereafter.**
6. **We, the Bank, do 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 the 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 for any time or from time to time any of the powers exercisable by the Government against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of the Government or any indulgence by the Government to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.**
7. This Guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s)
8. We, (indicate the name of the Bank)* lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the Government in writing.

Dated the day of _____ 21

For Seal & Signature (s) of the authorized official(s) with designation.

NOTE:

1. Words appearing between asterisk “*” marks are for guidance only and not to be typed in the final /fair document of the Bank Guarantee) *
2. The PBG/BG before submission to Railways to be ensured the following compliances:
3. CHECK LIST FOR SUBMISSION OF PBG

SN	Description
1	Document (PBG/BG) should be as per format
2	Sufficient Stamp duty to be paid as per stamp duty Act of the state where PG executed
3	Date of purchase of stamp paper is timely executed i.e., on or after date of purchase of stamp paper.
4	BG No. amount, Date of issue, validity period mentioned or not
5	LOA No. is mentioned or not
6	Detail of work with Railways mentioned or not
7	BG number mentioned on all pages or not
8	Document paginated or not
9	Signatories signed with PA/SS Nos. and designation seal affixed or not
10	Bank round seal affixed or not
11	Signatures of two executants with PA/SS Nos. in BGs wherever applicable as per Banksprocedure and designation seal affixed or not
12	Uniform dates like BG date, validity date etc., is incorporated or not
13	Amount in figures is tallying with amount in words or not
14	Corrections by pen, if any, is attested by the executants with seal or not.

PROFORMA - 8

NEFT MANDATE FORM

TENDER NOTICE NoDt...../... /.....

Name of work:

To,

FA&CAO/CN/BNC

SOUTH WESTERN RAILWAY

Sir,

We prefer to the National Electronic Fund Transfer (NEFT) being followed by South Western Railway for remittance of our payments using RBI's NEFT scheme. In confirmation to this, I/We agree to receive our payments being made through the above scheme to our under noted Account.

S. No.	Details to provide by Tenderer	Details to be filled up by the Tenderer
1	Name of Tenderer	
2	Full postal Address with PIN Code	
3	Email Address of Tenderer	
4	PAN number of Tenderer	
5	Bank's Name & Branch	
6	Full Address of Bank	
7	Name of City	
8	Bank Code No.	
9	Bank Telephone/Fax No. & Email	
10	Bank's IFSC Code for NEFT	
11	Bank's IFSC Code for RTGS	
12	Bank's MICR Code	
13	Tenderer Bank Account Number	
14	Type of Bank Account	
15	Tenderer Name as per Bank Account	
16	Telephone Nos. of Tenderer BSNL/Landline Mobile/Cell Phone Fax Number	
17	GSTIN No.	

(Tenderer should note that the above particulars are necessarily to be provided for return of EMD, SD & Other payments due, to the tenderer during execution and on completion of work).

Certified that the above bank particulars of tenderer are correct as per Bank records.

Name & Signature of Bank Official with Stamp

PROFORMA - 9

FORM FOR REPORTING OF EMPLOYMENT

(Proforma to be filled in and signed by the Tenderer and submitted along with the tender)(Strike out whichever is not applicable)

1. The undersigned -

- (a) Is a retired Gazetted officer holding prior to retirement a pensionable/ non-pensionable post in the Engineering Department of the Railway.
- (b) Is a partnership firm having as one of its partners a retired Engineer or a retired Gazetted officer as aforesaid.
- (c) Is an incorporated company having any such retired Engineer or retired Gazetted officer as aforesaid, as one of its directors.
- (d) Is having in my employment any retired Engineer or retired Gazetted officer as aforesaid.
- (e) Has no such retired Engineer or retired Gazetted officer so associated with me as stated above.

2. If falling under any of the above categories (a) to (d) , particulars of the officer may be furnished hereunder:

- (i) Post held before retirement
- (ii) Date of retirement
- (iii) If not retired at least two years prior to date of submission of tender, state whether permission for taking such contracts has been obtained

from the President of India or any officer duly authorized in this behalf

3. If the Tenderer or in the case of a firm or company, any of the shareholders has a relative or relatives employed in Gazetted capacity in the Engineering or any other Department of the Railways, particulars of such relatives in the Railway may be furnished hereunder---

- (i) Name
- (ii) Designation
- (iii) Relationship

Signature of Tenderer(s)

NAME.....

ADDRESS.....

PROFORMA-10

**SOUTH WESTERN RAILWAY FORM FOR SUBMISSION OF REQUEST FOR AVAILING LETTER OF CREDIT AS
MODE OF PAYMENT**

TO

THE PRESIDENT OF INDIA,

Acting through the Dy.CSTE/Proj/SBC Bangalore, South Western Railway.

Sir,

Subject: Name of the work: -----

Ref: Tender Notice no: -----; Item no: -----

I/We----- (Name of Individual/ Firm/Company/JV etc) represented by its authorized signatory Sri / Smt. hereby submit that, in the event of I / We becoming a successful tenderer in the subject tender and followed by Railway placing on us the order for work execution, I / We intend to register our request for availing the grant of Letter of Credit as mode of Payment as per the terms and conditions applicable for this purpose as detailed in tender conditions.

I/We have read and understood the conditions of tender/contract pertaining to Mobilization Advance and do here by agree that I / We abide by all terms and conditions of tender / contract governing Mobilization Advance. Further, I / We hereby agree that subsequent modifications, if any, in respect of grant of Mobilization Advance issued from time to time by Railway during the currency of the contract is binding on us.

(Signature of the Tenderer)

Name:

Place: Date: Address:

PROFORMA - 11 INDEMNITY BOND FOR SUPPLY OF MATERIAL

INDEMNITY BOND FOR SUPPLY OF MATERIALS TO THE CONTRACTOR

We _____ here by undertake that we hold that we hold in our custody for and on behalf of the President of India acting in the premises through the Deputy Signal & Telecommunication, Engineer /Project /SBC South Western Railway (herein after referred to as the purchaser) and as his property in trust of him all imported and indigenous materials which have been handed over to us against the contract for on South Western Railway vide letter of acceptance such as handed over to us by the purchaser for the purpose of execution of the said contract, until such time the materials are duly erected or otherwise handed over to him. We shall entirely be responsible for the safe custody and protection of the said materials against all risk till they are duly delivered as erected equipment to the purchaser or as he may direct otherwise and shall indemnify the purchaser against any loss, damage or deterioration whatsoever in respect of the said materials while in our possession and against disposal of surplus materials. The said materials shall at all time opened to inspection by any officer authorized by the Deputy Signal & Telecom Engineer/Project/SBC, South Western Railway. Should any loss, damage or deterioration of materials occur or surplus materials disposed off and refund becomes due the purchaser shall be entitled to recover from us the full cost and compensation determined in terms of the contract for such loss, damage or deterioration, if any along with the amount to be refunded, without prejudice to any other remedies available to him, by deduction from any sum due/any sum which at any time hereafter becomes due to us under the said or any other contracts.

In the event of any loss, damage or deterioration as aforesaid the assessment of such loss or damage and the assessment of such compensation therefore would be made by the President of India or his authorized nominee and the said assessments shall be final and binding upon us.

Dated this day _____

For & on behalf of the contractor.

Signature of Witnesses.

- 1.
- 2.

(Name of the witnesses in block letters. Address)

PROFORMA - 12

CERTIFICATE OF COMPETENCY

Certified that Sri Signaling / Telecom. Works supervisor of M/s.
..... has been examined regarding Safety Working in Railway areas in connection with Work
under Contract Agreement No. (s).....His knowledge has been
found satisfactory and he is capable of supervising the work safely.

I

Issued by: (Railway Supervisor's Signature, Name and designation).

Countersigned by: (Name & Signature of ASTE/DSTE with stamp)

PROFORMA - 14

CERTIFICATE OF FAMILIARISATION/_DECLARATION FOR SITE VISIT

e-Tender Notice No.:

Name of Work:

I/We hereby solemnly declare that I /We visited the sites of work personally and have made myself/ourselves fully conversant of the conditions therein and in particular the following:

- i) Topography of the area
- ii) Soil strata at site of work
- iii) Sources and availability of construction materials
- iv) Rates for construction materials, water, electricity including all local takes, royalties, octroi, etc.
- v) Availability of local labour (both skilled and unskilled) and relevant labour rates and labour laws
- vi) Existing roads, approaches, pathway to site of work
- vii) Space for stacking of materials, stores, office etc.
- viii) Availability and rates of private land, etc. required for various purposes
- ix) Trees, shrubs, bushes, debris etc. required to be removed for site clearance
- x) Need of dewatering / pumping etc.
- xi) Climate conditions and availability of working days and working hours
- xii) Frequency / pattern of rail traffic, electrified tracks, road traffic etc.
- xiii) Availability of rail/road traffic block
- xiv) Law and order situation.
- xv) Any other conditions, which may affect rates.
- xvi) Signalling and Telecom installations including stations, ABS Huts, IBS Huts and LC Gates and Signal and Telecom gears connected thereto.

I/We have quoted my/our rates for various items in the tender schedule taking into account all the above factors likely to be encountered during execution of work. I/We shall not be entitled for any claim against Railway on account of the above factors.

I/We hereby declare that no such retired engineer or Gazetted Officer (as defined in clause 17.1 of this tender document) retired from government service within one year prior to opening of this tender is working or associated with us.

Signature of the Tenderer

PROFORMA - 15

STRUCTURE AND ORGANISATION

1. Name of Tenderer
2. Nationality of Tenderer
3. Office Address Telephone Number FAX Number
4. Year and Location of Establishment
5. The Tenderer is
 - a) An individual
 - b) A proprietary firm
 - c) A firm in partnership
 - d) A Limited company of Corporation.
6. **Attach the original chart showing the structure of the organization including the names of the Directors and position of Managers.**
7. **For how many years has your organization been in business of similar work under its present name? What were your fields when your organization was established? Whether any new fields were added in your Organization? And if so, when?**
8. Number of years of experience.
 - a) As a Prime Contractor (Contractor shouldering major responsibility)
 - b) As Sub-contractor (Specify main contractor)
9. Whether you were ever required to suspend construction for a period of more than six months continuously after you started? If so give the name.

10. Have you ever left the work awarded to you incomplete? (If so, give name of Project and reasons for not completing work).
11. **In how many of your projects were penalties imposed for delays? (Please give details)**
12. In which fields of Signal & Telecommunication construction works do you claim specialization and interest?
13. **Give details of annual work record, in respect of S & T works.**
14. **Give details of your experience in mobilizing works costing more than 50 lakhs with modern technology.**
15. **Give details of your testing laboratory and facilities if any.**
16. In how many of your works cases litigations/dispute/arbitration have arisen.

Signature of the Tenderer

PROFORMA – 17

Performa for Self-certificate in regard to meeting the Minimum Local content requirements (For Procurement Order Value less than of Rs.10 Crores)

"I / We (Name of the bidder) represented by
authorized

person on behalf of tenderer hereby certify that i/
we.....

Meet the

minimum 50 % of Local Content requirements for the work
.....

(To be filled as

notified in Tender document) and the following are the details of locations at the local
value addition is made for quoting offer against tender notice No..... Dt

.....
by us.

Details of locations at which the local addition is made: - 1.....

1.....

Place:

Date:

Signature of the tenderer

With seal