SOUTHERN RAILWAY

CHENNAI

TENDER DOCUMENT (TWO PACKET)

Provision of VOIP based Train Control Communication System Over Southern Railway

E-Tender Notice No: Proj1MS_VOIP-TCCS_24_RT01 Dated: 07.10.2024

Estimated Cost of the Work	Rs. 21,57,29,547.5/-, (Twenty-One Crores Fifty-Seven Lakhs Twenty-Nine Thousand Five Hundred Forty-Seven Rupees and Fifty paise only)
Cost of Tender Document	NIL
Cost of EMD/Bid Security	Rs. 12,28,700.00/- (Twelve Lakhs Twenty- Eight Thousand Seven Hundred Rupees only)
Validity of Offer	90 Days from date of tender opening
Completion Period	12(Twelve) Months
Last Date & Time for submission of Tender	29.10.2024 before 15.00hrs
Date and Time for Tender opening	29.10.2024 after 15.00hrs
Date and time of opening of Technical Bid (Packet –I)	29.10.2024 after 15.00hrs

Office of Deputy Chief Signal &Telecommunication Engineer/Projects/I Chennai Egmore, Southern Railway, G.C building, 1stFloor, Mc Nichols Rd, Chennai – 600 031.

Signature of Tenderer & Seal

PACKET- I TECHNICAL BID DOCUMENT (TWO PACKET SYSTEM)

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CHAPTER-1 TENDER NOTICE

SOUTHERN RAILWAY

TENDER NOTICE

E-Tender Notice No: Proj1MS_VOIP-TCCS_24_RT01 Dated: 07.10.2024

Office of the Deputy Chief Signal &Telecommunication Engineer, Project I, 1st Floor, G.C. Building, Mc Nichols Road, Chetpet, Chennai – 600 031.

1.0 Deputy Chief Signal & Telecommunication Engineer/Project I, Southern Railway, Chetpet, Chennai-31 for and on behalf of 'President of India' invites OPEN E-Tender in a TWO packet from the competent, experienced & established contractors having sufficient experience in similar work and satisfying minimum eligibility criteria on the prescribed form for the under noted work:

1	Name of the Work	Provision of VOIP based Train Control Communication System Over Southern Railway	
2	Estimated cost of the work	Rs. 21,57,29,547.5/-,	
3	EMD/Bid Security	Rs.12,28,700/-	
4	Completion period	12 (Twelve) Months.	
5	Last date and Time of online submission (closing) of tender document	29.10.2024 before 15.00 hrs	
6	Validity of offer	90 days from the date of opening of tender	
7	Last date and time for submission of Tender	29.10.2024 before 15.00 hrs	
8	Date and time of opening of Technical Bid (Packet –I)	29.10.2024 after 15.00 hrs.	

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9	Website Particulars for bid submission	 a) Bids are to be submitted online only. b) Tenderers must register on Indian Railways E-Procurement System (IREPS) site i.e., www.ireps.gov.in for participating in E-tender system. Necessary changes, Corrigendum/Addendum if required, would be posted on this site only. c) Bidders will be able to submit their original/revised bids up to closing date & time only. d) Manual bids/offers are not allowed against this tender. Any manual offer received shall be ignored.
10	Cost of the Tender Document	Nil
11	Participation of Joint Venture	Allowed for this tender as per Railway Board Guidelines
12	Bid Capacity	As per IR GCC-2022, and advance Correction Slip No. 1 to 7, Bid Capacity will be assessed for qualifying in the Technical Bid. Necessary supporting documents to be enclosed in IREPS.

Further particulars can be obtained from Indian Railways Website www.ireps.gov.in. Tenderers who wish to participate in tenders invited on www.ireps.gov.in have to register on the website mandatorily. Please refer to website for more details. Tenderers can submit their EMD/Bid Security through e payment gateway or shall upload as Bank Guarantee bond in IREPS website. Other than above means will not be accepted as EMD/Bid Security for tenders invited on IREPS (E-Tender portal)

Deputy Chief Signal &Telecommunication Engineer, Project I, Chetpet, Chennai –31 For & on behalf of the President of India

END OF CHAPTER -1

CHAPTER - 2 SPECIAL CONDITIONS OF CONTRACT

CHAPTER - 2

SPECIAL CONDITIONS OF CONTRACT

2.1 GENERAL INSTRUCTIONS:

- i) This Chapter shall be read in conjunction with Indian Railways Standard General Conditions of Contract (GCC) 2022 and advance correction slip No.1 to 7 which shall be subject to modifications, additions or supersession by these Special Conditions of Contract (SCC) and/or specifications/conditions, if any, which is part of this Tender Document.
- ii) The regulations for tenders and contracts shall be read in conjunction with the General Conditions of Contract which are referred to therein and wherever there is a conflict between the Special condition with GCC and SCC of S&T SOR 2011, then SCC of this contract prevails.
- iii) It may be noted that the "General Conditions of Contract April 2022" together with its correction slips is attached to the tender form.
- iv) Any deviations from these Special Conditions of Contract, Technical Requirement & Specifications, Schedule of Material & Supplies and/or any condition of tender document, if any, stated by the tenderer in his tender or subsequently introduced by the Railway shall be a part of the Contract only to such extent as have been explicitly accepted by the Railway and incorporated in the contract. Details shall be given in **Form No. 3** (in Forms and Annexures part of chapter 3).
- v) All offers are required to be submitted online on www.ireps.gov.in before the last date and time indicated in the Tender Notice.
- vi) Manual offers are not allowed for this tender. If any manual tenders are received same shall be ignored.
- vii) Provisions of Make in India Policy 2017 issued by Govt of India as amended from time to time shall be followed for consideration of tenders.
- viii) Any additional information regarding the tender, if required by the tenderer may be obtained from the Dy.CSTE/Project-I, Southern Railway, Chetpet, Chennai -31 during office hours.

2.2 RULES & GENERAL INFORMATION TO TENDERER:

(i) Non- transferable tender documents may be downloaded by registered bidder from <u>www.ireps.gov.in</u>. Bids are to be submitted online before the expiry of time and date of tender opening. Payment regarding the cost of EMD/Bid Security shall be through e payment gateway or shall submit as Bank Guarantee bond only in IREPS website. The notice header can be seen at www.ireps.gov.in.FDRs are not acceptable against EMD/Bid Security for this tender.

- (ii) Tenderer(s) are advised to refer, the "User Manual For Contractors" available in 'Learning Centre' tab in left navigation block on home page of E-Tendering portal www.ireps.gov.in for detailed instructions on submitting EMD/Tender cost/Bids online.
- (iii) Permitting downloading of tender document by Railway is facility for convenience of Tenderer(s). In case, tender document is not uploaded on website or download failure or incomplete document downloaded, Railway shall not be responsible in anyway. Railway shall not be responsible for any direct/indirect loss of business/Profit resulting from inability to use this facility.
- (iv) Tender document is not transferable and the cost of the tender form is Zero; hence tenderers have the facility to download to enable more participation.
- (v) The tenderer shall maintain the integrity of downloaded tender document and shall not make any change/alteration/deletion/tampering, whatsoever, in the downloaded documents. If the tenderer(s) deliberately give(s) wrong information in his/their tender, create(s) circumstances for the acceptance of his/their tender, Railway reserves the right to reject such tender at any stage. The tenderer's offer shall be rejected and full earnest money/Bid security shall be forfeited, in case it is detected after submission of offer, that they have made any modification in downloaded documents. In case such modification is noticed after award of contract, Railway is liable to terminate the contract on Contractor's default. In addition, Railway reserves the right to take action against the firm as deemed fit, which may include banning of business dealings with the firm and the firm is also liable to be prosecuted as per the law. In case of any dispute over the discrepancy noted in tender document submitted by Tenderer, the master document kept with Railway shall prevail and decision of Railway thereon shall be final and binding on the tenderer/contractor. The declaration in Form- 9 shall be given by the Tenderers while submitting the tender. [Refer Forms & Annexures of Chapter-3 of Tender Document]
- (vi) The tenderer(s) shall keep him updated about any modification in E-tender notice and E-tender document issued by Railway through newspapers, website or any other means and shall act accordingly. Tenderers are advised to download the tender documents well in advance and submit the tender before the stipulated date and time. It is the responsibility of the tenderer to check any correction or any modifications published subsequently in IREPS

Web site and the same shall be taken into account while submitting the tender. The Tenderers shall download corrigendum (if any), and upload it with the main tender document with his/her digital signature. Tender documents not accompanied by published corrigendum(s) are liable to be rejected

- (vii) The tender shall be signed by individual or individuals legally authorised to enter into commitments on behalf of the tenderer. Any individual(s) signing the tender documents or other documents connected therewith should specify whether he is signing:
 - a. As a sole proprietor of the firm or attorney of the sole proprietor.
 - b. As a partner or partners of the firm.
 - c. As a Director, Manager or Secretary or official with Power of Attorney as per memorandum/article of association in a Limited Company.
 - d. Individual(s) signing the tender documents must state that he/she is authorised to sign the same and submit documentary proof for same.
- (viii) Every tenderer shall state in the tender his postal address fully and clearly. Any communication sent in time to the tenderer by post at the said address shall be deemed to have reached the tenderer duly and in time. He shall also give telephone and fax number for communication. Important documents shall be sent by registered post.
- (ix) Incomplete and conditional tenders will generally not be considered and are liable to be rejected. Railway reserves the right to reject any special conditions stipulated by the tenderer as considered unacceptable to the Railway. If any deviations from the General conditions of Contract /Special Conditions of Contract/ Technical Specifications & Requirements/Schedule of works & Supplies are proposed by the tenderer, they should be mentioned on statement of deviation in **Form No.3** (in Forms & Annexures part of Chapter-3) and not elsewhere in the tender document. If the tender has no exceptions, the **Statement of Deviations** shall be submitted with a "NIL' statement. If the tenderer does not include this with the tender it shall be conclusive evidence that all conditions of contract are entirely acceptable to the Tenderer. All the relevant documents shall be uploaded along with the tender form as per the terms and conditions of the tender.
- (x) Tenderer without submitting requisite earnest money through online shall not be able to participate in the E-tendering process.
- (xi) All the relevant documents shall be uploaded along with tender form as per terms and condition of tender.
- (xii) All supporting documents to the offers shall be either type written/printed or written neatly in indelible ink in English and scanned with sufficient resolution for uploading on E-tendering portal such that clear hard copy can be taken for the same. Each page of the offer must be numbered consecutively, should bear the tender number and each page of the tender document including technical brochures, manuals etc., should be signed by the tenderer & should bear the seal of the firm. A reference to the total No. of pages comprising the offer must be made at the top right hand corner of the first page. Photocopies of all the certificates etc., submitted by tenderer should be attested by

tenderer as true copies, unless required to be attested by Notary public by other conditions of tender. No scribbling is permissible in the tender documents. Tender containing erasures and alterations in the tender documents are liable to be rejected. Any correction made by the tenderer(s) in his/their entries must be attested by him/them.

(xiii) Errors, Omission & Discrepancies (in the tender document):

- a. The contractor(s) shall not take any advantage of any misinterpretation of the conditions due to typing or any other error and if in doubt shall bring it to the notice of the tender inviting authority, without delay. In case of any contradiction, only the printed rules and books should be followed and no claim for the misinterpretation shall be entertained.
- b. If a tenderer finds discrepancies in, or omission from the drawing or any of the tender document or he has any doubt to their meaning, he should at once notify Dy.CSTE/Project/I, Southern Railway, Chetpet, Chennai-31 who may send a written clarification to all Tenderers or upload the Amendment & Corrigendum in www.ireps.gov.in as required.
- (xiv)After opening of the tender, any document/credential pertaining to the technical & financial eligibility and constitution of the firm will neither be asked nor be entertained/considered under any circumstance& nor claim nor representation whatever in this regard, from the tenderer shall be entertained.
- (xv) Clarification of Bids: To assist in the examination, evaluation & comparison and pre-qualification of the Tender, the Railway may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by the Railway shall not be entertained or considered. The Railway request for clarification and the response of the bidder in this regard shall be in writing. However, if a Bidder does not provide clarification of its bid by the date and time communicated in the Railway request for clarification, the bid shall be evaluated as per the documents submitted along with the bid.
- (xvi)The comparative tabulation of bids received against the open E-tender will be available online to participating firms immediately after opening of the Bid by Railway. However, tenderer or his authorized representative may attend the opening in the office of Deputy Chief Signal & Telecommunication Engineer, Project-I, Southern Railway, Chetpet, Chennai 31.
- (xvii) Date of inviting tender shall be the date of publishing tender notice on IREPS website.

2.3 NAME OF THE WORK:

"Provision of VOIP based Train Control Communication System Over Southern Railway."

2.4 BRIEF SCOPE OF WORK:

Provision of VOIP based Train Control Communication System at all divisions of Southern Railways as per RDSO Specification RDSO/SPN/TC/99/2023 Ver. 3.0 and as mentioned below:

The scope of this work is broadly for the execution of works such as

- 1. Supply and installation of all communication and Voice Recording Servers, Event Notification Gateways, Portable MT's, Mobile applications, Client PC's, HD monitors.
- 2. Supply of Servers,19" Racks, Power supplies and installation of the same at required locations.
- 3. Supply, Installation, Configuration, Testing and commissioning of Emergency communication gateway, Control Console, Test room console, controller IP Telephones at required locations
- 4. Supply and provision of NMS as per the schedule and configuring all the nodes for its proper working, monitoring and troubleshooting of Network at the required locations.
- 5. Supply, installation, configuration, integration and testing and commissioning of L2/L3 and 8 port POE switches as per the site requirements
- 6. Supply and laying of OFC, UTP CAT 6 cables as per the schedule.
- 7. Supply of associated interface equipment's, patch cords etc.,
- 8. Training to the Railway officials at OEM premises or at reputed training institutions.

2.4.1 CONTRACTOR'S SCOPE OF WORK:

- i) The contractor has to make all supplies as per schedule of works except the items mentioned under heading "Works to be done by Railways" in the tender document under Para 2.4.2
- ii) The contractor shall be responsible for employing of qualified personnel for supervision and execution of work as per GCC Clause No 26.
- iii) The contractor shall be responsible for supply of equipment/materials as per Technical specification & Requirement in line with Tender schedules.

- iv) The contractor shall be responsible for proper execution of work in line with Tender schedules.
- v) Lifting of materials/cables from designated stores/workshops to the site. Stacking the materials received and providing security arrangements to avoid any damage/loss of materials.
- vi) The contractor shall be responsible for Supply of Technical documents for the equipment offered by him.
- vii) Arranging the OEM Engineer for proper technical guidance during the work when needed.
- viii) Testing and commissioning of all equipment's with approved system design.
- ix) Wiring and cabling power supply & other modules, fuses and relay rack, surge protection device etc., .
- x) The contractor shall be responsible for warranty of the assets supplied and installed by him for a period of ONE Year i.e., after issuing of completion certificate by a JAG officer.
- xi) Laying of cables.
- xii) Supply of NMS, Servers, Gateways, layer 2/ layer 3 switches, 8port POE switches.
- xiii) Supply of Battery/chargers.

2.4.2 WORK TO BE DONE BY THE RAILWAYS:

Following works shall be done by Railways:

- i) Supply of raw EB Power supply. For any installation activities like drilling, soldering etc., necessary electric power supply shall be arranged by contractor.
- ii) Supervision of testing and commissioning of installation/equipment. This activity shall be done once tenderer has completed the testing of complete installation and offers it to Railways for their testing, verification and validation.
- iii) Supervising the entire project execution being carried out by the contractor.

2.5 QUALIFYING & ELIGIBILITY CRITERIA:

2.5.1 SIMILAR NATURE OF WORK:

For satisfying eligibility criteria for the subject tender, similar nature of work means "Any work involving supply, testing and commissioning of VOIP based TCCS system or IP Exchange or IPMPLS or Network connectivity for Railways or any other Government organization or any carrier class operator."

followed:

Following Special conditions of contract for this Telecom work to be

1. The bidder shall be OEM or authorized person from OEM who has to submit the authorization letter along with the offers.

2. If no RDSO approved firm is available in RDSO approval list for VOIP based TCCS at the time of tender opening, then the definition of OEM is Manufacturer of train control communication system (IP controller console equipment, emergency communication gateway, associated software incl. of communication software, voice recording software etc.) which has been installed and commissioned along with VOIP based emergency communication gateway for at least 10% or more Railway stations (rounded off to next integer) of the VOIP based TCCS work, as per the specification RDSO/SPN/TC/99/2012/Rev.2 or the latest RDSO spec with satisfactory performance.

Note: 10% of 516 stations is 52 stations. Hence satisfactory performance certificate for commissioning of 52 stations or more with VOIP based control communication system has been installed and commissioned along with VOIP based emergency communication gateway

- 3. VOIP based TCCS work shall be executed as per the RDSO/SPN/TC/99/2023 Ver.3.0 dtd.10.11.2023 or latest (Refer Annexure 8). POC applicable, if any as per the latest RDSO spec / TAN at the time of tender opening, shall be carried out within a period of 45 days from the date of tender opening.
- 4. Make and Model of scheduled item with reference to RDSO specification RDSO/SPN/TC/99/2023 Ver.3.0 dtd.10.11.2023 or latest shall be submitted along with the bid.
- 5. Manufacture authorization and Certificate copy of Clause-by-Clause technical Compliance from OEM of Controller Console Equipment, Test room Console, Emergency Communication Gateway (ECGW) and DTMF Gateway shall be submitted along with the bid.
- 6. Communication Server, NMS Server, Voice Recording Server hardware shall be from reputed make as per specification RDSO/SPN/TC/99/2023 Ver.3.0 dtd.10.11.2023 or latest (Refer Annexure 8).
- 7. Test certificate / Test report of Controller Console Equipment, Emergency Communication Gateway (ECGW) and DTMF Gateway shall be submitted by the bidder along with the bid for Environment test, EMC tests and electrical safety test as per RDSO SPECIFICATION FOR VOIP BASED TRAIN CONTROL COMMUNICATION SYSTEM RDSO/SPN/TC/99/2023 Ver.3.0 dtd.10.11.2023.
- 8. Inspection would be done by RDSO with RDSO Test Format TC-F-8.1-2 effective from 06.02.2024 (Refer Annexure 8).

 Non-Submission of Manufacturer authorization, test certificates and clause by clause technical compliance as per RDSO Specification RDSO/SPN/TC/99/2023 Ver.3.0 dtd.10.11.2023 shall be liable for rejection of offer.

2.5.2 TECHNICAL ELIGIBILITY: -

Tenderer must have successfully completed or substantially completed any of the following <u>during last 07 (SEVEN) years</u>, ending last day of month previous to the one in which tender is invited.

One Similar work costing not less than the amount equal to 60% of the advertised tender value.

(OR)

Two Similar work costing not less than the amount equal to 40% of the advertised tender value.

(OR)

Three Similar work costing not less than the amount equal to 30% of the advertised tender value.

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 Crores 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 opening 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.

The tenderer shall submit a certificate to this effect in the format given in Form No.1A for physically completed works and in Form No 1B for substantially completed works (in Forms & Annexures part of Chapter - 3) of the tender document. Certificates to be duly certified by minimum JAG Officer. Note:

a) 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.

- b) In case a work is started prior to 07 (seven) years, ending last day of month previous to the one in which tender is invited, but completed in last 07 (seven) years, ending last day of month previous to the one in which tender is invited, the completed work shall be considered for fulfilment of credentials.
- c) If a work is physically completed and completion certificate to this extent is issued by the concerned organization but final bill is pending, such work shall be considered for fulfilment of credentials.
- d) 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.
- e) 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.
- f) In case a work is considered similar in nature for fulfilment 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.
- g) If a bidder has successfully completed work as a 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 a note for item 10.1 part I of GCC, the same shall be considered to fulfil credentials.
- h) In the case of a 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 a newly formed partnership firm. For example, partner A had a 30% share in the previous entity, and his share in the present partnership firm is 20%. Therefore, 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 a copy of previous partnership deed(s), dissolution deed(s), and proof of surrender of PAN No.(s) in case of dissolution of a partnership firm(s), etc.
- i) In the case of an existing partnership firm, if anyone or more partners quit the partnership firm, the credentials of the remaining partnership firm shall be reworked 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 of 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 a copy of previous partnership deed(s), dissolution deed(s), and proof of surrender of PAN No.(s) in case of dissolution of a partnership firm(s), etc.

- j) 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.
- k) 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.
- 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.
- m)If the percentage share among partners of a partnership firm is changed, but the partners remain the same. In that case, the firm's credentials before such modification in the share will continue to be considered for the firm as it is without any change in their value. Further, if a partner of a partnership firm retires without taking away any credentials from the firm, the credentials of the partnership firm shall remain the same as it is without any change in their value.
- n) 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 another partnership firm "AX" earned after the date of becoming a partner of the firm AB shall not be added in partnership firm AB.
- o) In case a tenderer is LLP, the credentials of the tenderer shall be worked out on the above lines similar to a partnership firm.
- p) In case company A is merged with company B, then company B would also get company A's credentials.

2.5.3 FINANCIAL ELIGIBILITY: -

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 **Form No.2**, along with copies of Audited Balance Sheets duly certified by the Chartered Accountant/ Certificate from Chartered Accountant duly supported by Audited Balance Sheet.

2.5.4 BID CAPACITY

The tender/technical bid will be evaluated based on bid capacity formula detailed as per Annexure -6.

2.6 **GUIDELINES FOR PARTICIPATION OF JOINT VENTURE FIRMS**:

- (i) Separate identity/name shall be given to the Joint Venture firm.
- (ii) Number of members in a JV firm shall not be more than THREE.
- (iii) A member of JV firm shall not be permitted to participate either in individual capacity or as a member of another JV firm in the same tender.
- (iv) The tender form shall be purchased and submitted only in the name of the JV firm 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.
- (v) EMD/Bid Security shall be deposited by JV or authorized person of JV through E-payment gateway or 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.
- (vi) One of the members of the JV firm shall be its <u>Lead Member</u> who shall have a majority (at least 51%) share of interest in the JV firm. The other members shall have a share of not less than 20% each in case of JV firms with up to three members. In case of JV firms with foreign member (s), the lead member has to be an Indian firm with a minimum share of 51%.
- (vii) A copy of Memorandum of Understanding (MOU) duly executed by the JV members on stamp paper, shall be submitted by the JV along with the tender. The complete details of the members of the JV firm, their share and responsibility in the JV etc., particularly with reference to financial, technical and other obligations shall be furnished in the MOU. The MOU format for this purpose is enclosed as **Annexure-1** (in Forms & Annexure part of chapter 3).
- (viii) Once the tender is submitted, the MOU shall not be modified/altered/ terminated during the validity of the tender. In case the tenderer fails to observe / comply with this stipulation, the full EMD/Bid Security shall be forfeited. In case of successful tenderer, the validity of this MOU shall be extended till the currency of the contract expires.
- (ix) Approval for change of constitution of JV shall be at the sole discretion of the Railways. The constitution of the JV shall not normally be allowed to be modified after submission of the tender bid by the JV, except when modification becomes inevitable due to succession laws etc. and in any case the minimum eligibility criteria should not get vitiated. However, the Lead Member should

continue to be the Lead Member of the JV. Failure to observe this requirement would render the offer invalid.

- (x) 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 in any case the 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.
- (xi) On award of contract to a JV, a single performance guarantee shall be submitted by the JV as per tender conditions. All the Guarantee's like Performance Guarantee, Bank Guarantee for Mobilization Advance etc., shall be accepted only in the name of the JV firm and no splitting of guarantee amongst the members of the JV firm shall be permitted.
- (xii) On issue of LOA (Letter of Acceptance), the JV entity to whom the work has been awarded, shall form a legal entity if not already formed, which shall have the same shareholding pattern, as was declared in the MOU/JV agreement submitted along with the tender. The entity 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 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.
- (xiii) This JV agreement shall be submitted by the JV firm to the Railways before signing the contract agreement for the work. This agreement should invariably be made on the basis of agreed terms and conditions as made in the MOU. In case the tenderer fails to observe/comply with this stipulation, the full EMD/Bid Security shall be forfeited and other penal actions due shall be taken against partners of the JV and the JV. This joint venture entity so registered, in the registered documents, shall have, inter-alia, the following clauses:
- a) Joint and several liabilities: The members of the JV 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 the contract. The members of the JV 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.
- b) **Duration of the Joint Venture Registered Entity:** It shall be valid during the entire currency of the contract including the period of extension, if any and the maintenance/warranty period after the work is completed.

- c) **Governing laws**: The Joint Venture Registered Entity shall in all respect be governed by and interpreted in accordance with Indian Laws.
- (xiv) **Authorised Member:** Joint Venture members in the JV MOU shall authorise one of the members on behalf of the Joint Venture to deal with the tender, 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 authorised member of the JV.
- (xv) 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 Railways in respect of the said tender/contract.
- (xvi) Documents to be submitted/uploaded by the JV along with the tender:
 - (A) In case one or more of the members of the JV is/are partnership firm(s), the following documents shall be submitted:
 - a) A notarized copy of the Partnership Deed, or a copy of the Partnership deed registered with the Registrar.
 - b) A copy of consent of all the partners or individual authorised by partnership firm, to enter into the Joint Venture Agreement on a stamp paper.
 - c) A notarized or registered copy of Power of Attorney (duly registered as per prevailing law) in favour of the individual to sign the MOU/JV Agreement on behalf of the partnership firm and create liability against the firm.
 - d) 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.
 - (B) In case one or more members is/are proprietary firm or HUF, the following documents shall be enclosed:
 - 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/she is in position of "KARTA" of Hindu Undivided Family (HUF) and he/she has the authority, power and consent given by other partners to act on behalf of HUF.
 - (C) In case one or more members of the JV is/are companies, the following documents shall be submitted:
 - a) A copy of the resolution of the Directors of the Company, permitting the company to enter in to a JV agreement.

- b) A Copy of Memorandum and Articles of Association of the Company.
- c) A copy of Certificate of Incorporation
- d) 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.
- (D) In case one or more members of the JV is/are LLP firm/s, the following documents shall be submitted:
 - a) A copy of LLP Agreement
 - b) A copy of Certificate of Incorporation of LLP
 - A copy of resolution passed by partners of LLP firm, permitting the Firm to enter into a JV agreement
 - d) 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.
 - e) 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.
- (E) In case one or more members of the JV is/are Society/s or Trust/s, the following documents shall be submitted:
 - a) A copy of Certificate of Registration
 - b) A copy of Memorandum of Association of Society/Trust Deed
 - c) A copy of Rules & Regulations of the Society
 - d) A copy of Power of Attorney, in favour of the individual to sign the tender documents and create liability against the Society/Trust.
- (F) All the members of the JV shall certify that they are not black listed or debarred by Railways or any other Ministry/Department/PSU (Public Sector Undertaking) of the Govt. of India/State Govt. from participation in tenders/contract on the date of opening of bids either in their individual capacity as members of the JV in which they were/are members.

2.6.1 PROSPECTIVE JOINT VENTURE FIRM SHALL SATISFY THE MINIMUM ELIGIBILITY CRITERIA AS GIVEN BELOW:

2.6.1.1 <u>Technical Eligibility Criteria – (in conjunction with Para 2.5.2 above)</u>

The Technical eligibility for the work as per Para 2.5.2 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 2.5.2 above, shall have technical capacity of

minimum 10% of the cost of the work i.e., each non-lead member of JV 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 10% of advertised value of the tender.

Note:

1) Value of 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.

2) Details of Similar Works executed shall be given in the format given in **Form No. 1A** (in Forms & Annexures Part of Chapter-3).

2.6.1.2 Financial Eligibility Criteria - (in conjunction with Para 2.5.3 above):

The JV shall satisfy the requirement of "Financial Eligibility" mentioned at Para 2.5.3 above.

Note:

- a) The Financial capacity of the Lead partner of JV shall not be less than 51% of the financial eligibility criteria mentioned in Para 2.5.3 above.
- b) The arithmetic sum of individual "Financial Capacity" of all the members shall be taken as JV's "Financial Capacity" to satisfy the requirement.
- c) Contractual payment received by a member in an earlier JV shall be reckoned only to the concerned member's share in that JV for the purpose of satisfying compliance of the above-mentioned financial eligibility criteria in tender under consideration.
- d) Details shall be given in the format given in **Form No.2** (In Forms & Annexure part of chapter 3).
- e) Separate forms should be used for each JV member as required and then consolidated as per format in **Form No.2** (In Forms & Annexure part of chapter 3).

2.7 Earnest Money Deposit / Bid Security:

1. (a) The tenderer shall be required to submit the EMD/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. The EMD/Bid Security shall be as under:

Value of the Work	EMD/Bid Security
For works estimated to cost up to ₹ 1 crore	2% of the estimated cost of the work
For works estimated to cost more than ₹ 1 crore	₹ 2 lakh plus ½% (half percent) of the excess of the estimated cost of work beyond ₹ 1 crore subject to a maximum of ₹ 1 crore

Note:

i. The EMD/Bid Security shall be rounded off to the nearest ₹100. This EMD/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 EMD/Bid Security detailed above.
- iii. Labour Cooperative Societies shall submit only 50% of above EMD/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 EMD/Bid Security mentioned in sub para (a) above will be retained as part security for the due and faithful fulfilment of the contract in terms of Clause 16 of the Standard General Conditions of Contract. The EMD/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 EMD/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 5** and shall be valid for a period of 90days beyond the bid validity period.

(3) In case, submission of EMD/Bid Security in the form of Bank Guarantee, following shall be ensured:

- 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 before closing date for 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 etendering 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

- vi. The Bank Guarantee shall be placed in an envelope, which shall be sealed. The envelope shall clearly bear the identification "Bid for the "Name of Work" 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 Authority 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.
- a) For the due performance with the stipulation to keep the offer open till such date as specified in the tender, under the tender conditions.
- b) 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 EMD/Bid Security mentioned above shall be forfeited by the Railway.

Note:

If the tenderer withdraws his offer within the validity date of his offer, the full EMD/Bid Security shall be forfeited.

- ii) The EMD/Bid Security will not be accepted in cash, FDR (Fixed Deposit Receipt), or banker's cheques/Demand Drafts.
- iii) The tenderer shall not submit any bids online unless the tenderer has deposited requisite EMD/Bid Security online / submitted as Bank Guarantee bond on the E-Tendering portal of Indian Railways www.ireps.gov.in.
- iv) No interest shall be payable on EMD/Bid Security by Railways.
- v) No previous EMD/Bid Security or Security Deposit, etc., submitted earlier in connection with any tender (s), will be adjusted towards the present, nor will any such request or correspondence be entertained.
- vi) Any firm recognized by the Department of Industrial Policy and Promotion (DIPP) as 'Startups' shall be exempted from payment of EMD/Bid Security
- vii) Labour Co-operative Societies shall deposit only 50% of the above EMD/Bid Security deposit detailed above.
- viii) If the tender is accepted, the amount of EMD/Bid Security will be retained and adjusted as part of the security deposit for the due and faithful fulfilment of the contract.
- ix) The deposit shall be forfeited without prejudice to any other right or remedies if the tenderer does not execute the contract agreement after acceptance of the

tender within 7 (seven) days after receipt of notice issued by the railways that such documents are ready and or the tenderer does not commence the work within fifteen days from date of issue of the acceptance letter.

- x) If the 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 towards Full Security Deposit or the Part Security deposit equal to or more than EMD/Bid Security, the Railway shall return the EMD/Bid Security so retained to the Contractor.
- xi) The EMD/Bid Security of the unsuccessful tenderer(s) will, save as hereinbefore provided, be returned to the unsuccessful tenderer(s) within a reasonable time. Still, the Railway shall not be responsible for any loss or depreciation that may happen to the security for the due performance of the stipulation to keep the offer open for the period specified in the tender document or to the EMD/Bid Security while in their possession nor be liable to pay interest thereon.

2.8 STUDY OF LOCAL CONDITIONS:

The intending tenderer are advised to study the Tender Document, Technical specifications, Schedule of supplies and other instructions carefully. The tenderer shall inspect the proposed site of work and acquaint himself with the site conditions, working hours, layout of land, trees and shrubs that he will have to cut, type of strata likely to be met while excavation, stacking space for materials, approach roads, pathways available etc., and all relevant items connected with execution for the work. No claim shall be entertained for the contractors making his own arrangements for approach roads from outside Railway land and contractors will bear entire expenses such as road taxes, payment for right of way etc., to outsiders and for constructions of approach roads etc..

It will be imperative for the tenderer to fully acquaint themselves with all the local conditions and other factors which would have any effect on the performance of the contract and cost of the stores. After the offer is accepted by the Indian Railway, no request for the change of rate or time schedule of delivery of stores/execution of work shall be entertained on account of any local condition or factors.

The tenderer may undertake study/survey of existing telecom systems, working of existing TDM/IP networks as per the practice of Railways and makes his own assessment of the work. In the event of the tenderer desiring to have a field visit before furnishing his offer, he may apply to Dy.CSTE/Project-I/MS, Southern Railway, for permission in this regard. Such permission shall be granted by the Railway but the expenses in this regard shall be borne by the tenderer completely.

Any submission of an offer by the tenderer shall be deemed to have been done after a careful study and examination of this tender document and site conditions with full understanding of the implication thereof. It will be understood that the tenderer has/have got herself/himself/themselves clarified on all the

points and interpretation by proper authorities of the Indian Railway Administration. These conditions and specifications shall be deemed to have been accepted unless otherwise, specifically commented upon by the Tenderer in his offer. Failure to adhere to anyone or all these instructions may render his offer liable to be ignored without any reference.

2.9 CLARIFICATION REQUIRED BY THE TENDERER:

Specifications, Drawings, Plans etc. related to the above subject work can be obtained from the office of Dy.Chief Signal Telecommunication Engineer/Project-I, Southern Railway, Chetpet, Chennai-31.

If a Tenderer finds discrepancies in or omission from the drawing or any of the Tender document or should he be in doubt as to their meaning, he should at once notify the Railway i.e., authority inviting tenders by post or email to dycsteproj1ms@sr.railnet.gov.in, who may send a written clarification to all Tenderer(s). Any clarification regarding discrepancies in the tender should be submitted in writing to Deputy Chief Signal Telecommunication Engineer/Project-I, Southern Railway, Chetpet, Chennai-31 before participating in the tender.

2.10 SUBMISSION OF TECHNICAL BID (PACKET-1) INCLUDING DOCUMENT'S REQUIRED:

The online Tender shall be accompanied by relevant documents of technical conditions and requirements mentioned in the tender document. Furthermore, all uploaded documents shall be digitally signed by the tenderer. Hence, the tenderer(s) must ensure that these documents are uploaded, duly signed digitally, with their offer.

The Tenderer shall be submitted with the following documents:

- I. Offer letter complete along with tender document including tender forms (First sheet & Second sheet), complete tender document downloaded from the website including its addendums/corrigendum's if any, duly signed digitally.
- II. The tenderer shall specify whether the tender is submitted on his own (Proprietary Firm) or on behalf of a Partnership Firm / Company / Joint Venture (JV) / Registered Society / Registered Trust / HUF etc. In addition, the tenderer(s) shall enclose the attested copies of the constitution of their concern and a copy of the PAN Card along with their tender. Tender Documents in such cases are to be signed by such persons as they may be legally competent to sign them on behalf of the firm, company, association, trust, or society, as the case may be. Refer to Para 14 of Tender Form Second Sheet [in Forms & Annexures of Chapter-3] regarding documents to be submitted by the tenderer.
- III. Requisite EMD/Bid Security shall be submitted online; otherwise, the tenderer shall not be able to participate in the E-tendering process. EMD/Bid Security shall only be submitted online through Net-Banking/Debit/Credit cards or

payment gateway. A scanned copy of the Bank Guarantee shall be uploaded on e-Procurement Portal (IREPS) while applying to the tender. 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 submission of bids. 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 documents required for ascertaining Technical & Financial capability as specified in Qualifying Criteria, i.e., Para 2.5 of Chapter-2 of this Tender document, shall be enclosed in the offer. In addition, the tenderer should upload, duly signed digitally, detailed documents to fulfil each condition stipulated above in the criteria.
- V. Work experience certificate/Credential Certificate/Performance Certificate: (In English or transcript in English with a copy of original document) describing work, the organization for whom executed approximate value of the contract at the time of award, date of award, and date of scheduled/actual completion of work. Date of actual start, the actual date of physical completion, and the final value of the contract regarding meeting Eligibility Criteria Para 2.5.2 for satisfactory and physical completion as per Form No.1A (in Forms & Annexures part of Chapter -3). The performance certificate (s) from user Railway (with contact details of FAX, phone, and E-Mail of issuing authority) satisfying the above conditions and satisfactory working of the system shall be furnished. Note:

The experience certificate should have been issued by an officer, not below JA Grade

- VI. The detailed list of year-wise contractual payments received in **Form No. 2** (in Forms & Annexure part of Chapter 3) regarding meeting financial eligibility criteria i.e Para 2.5.3. The tenderers shall submit requisite information as per **Form No. 2** (in Forms & Annexure part of Chapter 3), along with copies of Audited Balance Sheets duly certified by the Chartered Accountant/Certificate from Chartered Accountant duly supported by Audited Balance Sheet. **Bid capacity:** The details for Bid capacity as per Annexure-6 shall be submitted the tenderer/bidder.
- VII. List of Works Completed/ List of works on hand: The attested certificate from tenderer shall include description of work, an organization for whom executed approx. Value of contract at the time of award, date of award and date of scheduled completion of work, the actual date of physical completion, year-wise payments made, and total payment made up to the date of tender opening as per Form No. 8 (in Forms & Annexures part of Chapter-3). List of similar types of work completed and works on hand duly indicating the description of work, contract value, date of award of contract, and details of contractual amount received duly certified by tenderer in Form-8 (in Forms and Annexures Chapter-3).
- VIII. Certification regarding employment of a retired Engineer of the Gazetted Rank or any other Gazetted officer working before his retirement.

IX. The tenderer shall also enclose in their offer that they accept all the terms and conditions of Railways. Furthermore, the tenderer shall indicate paragraph by paragraph for each section and each clause and sub-clause of the entire tender document that complies in every respect with the requirements of each clause and sub-clause if not precisely how they differ from the requirements of the tender. In the latter case, the tenderer shall enclose a separate - Statement of Deviations as per Form No. – 3 (in forms and annexure part of chapter 3) given, indicating only the deviations for any clause or sub-clause of GCC, Special Conditions of Contract, Specification and Schedule of Works and Supplies, etc., which they propose with 'detailed justifications for deviations proposed.' Railway reserves the right to accept or reject these deviations, and the Railway's decision thereon shall be final.

If the tender has no exceptions, the **Statement of Deviations** shall submit a "NIL' statement. If the tenderer does not include this with the tender, it shall be conclusive evidence that all contract conditions are entirely acceptable to the Tenderer.

- X. List of Personnel, Organization available on hand and proposed to be engaged for the subject work. Similarly, a list of Plant & Machinery available on hand and proposed to be inducted and hired for the tendered work.
- XI. The tenderer shall submit a copy of the certificate stating that they are not liable to be disqualified and all their statement/documents submitted along with the bid are accurate and factual. The standard format of the affidavit to be submitted by the bidder is enclosed as Form No 9 (in forms and annexure part of chapter 3). In addition to Form 9,in case of other than company/Proprietary firm, Form 9(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 certificate(s) by the bidder shall result in summary rejection of his/their bid. In addition, 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.
- XII. Provisions of Make in India Policy 2017 issued by Govt of India as amended from time to time shall be followed for consideration of tenders.
- XIII. Any other information desired to be submitted by the tenderer as per the terms and conditions of tender.

Note:

- 1) No scribbling is permissible in the tender documents. Tenders containing erasures and alterations in the tender documents are liable to be rejected. Any correction made by the tenderer in his entries must be self-attested.
- 2) Tenderer must furnish duly filled CHECK LIST given under **Annexure 6** (in forms and Annexure part of Chapter-3) of the tender document along with all supportive documents.

- 3) 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. However, 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.
- 4) In case any information submitted by the tenderer is found to be false, forged, or incorrect during the process for evaluation of tenders, it shall lead to forfeiture of the tender EMD/Bid Security besides banning business for a period of upto Two years.
- 5) In case of any information submitted by the tenderer is found to be false forged or incorrect after the award of contract, the contract shall be terminated. EMD/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 the agency shall be banned from doing business for a period of upto Two years

2.11 SUBMISSION OF FINANCIAL BID (PACKET-II):

- i. All rates must be submitted in the tab for financial offer only on the E-tendering portal. The financial bid will be opened subsequently (on a date which will be notified later) for the tenderer who fulfil the laid down technical and financial eligibility criteria. The offers which are found technocommercially ineligible will be dismissed.
- ii. Rates of stores, materials and works are to be quoted according to the (online web portal) proforma of "Schedule of work and supplies" (Financial Bid). Rates in the offer should be in Indian Rupees only. Offers in foreign currency will not be accepted.
- iii. Tenderers are requested to quote **single percentage for Schedule A** and **individual rates for each item** in **schedule B** in the Financial Bid in IREPS online web portal only.
- iv. The tenderer shall quote the complete rate for all items of works given in the schedule of works and supplies in the Financial Bid in IREPS portal only to complete entire scope of work and make system completely functional. Offer received for only part of schedule will not be considered and bid shall be rejected.
- v. No Rates to be quoted/enclosed in Technical Bid document otherwise offer is not considered for evaluation.

2.12 VALIDITY OF OFFERS:

2.12.1 The tenderer shall keep the offer open for a minimum period of **90 Days** from the date of opening of tender. Within that period, the tenderer cannot withdraw her/his/their offer subject to the period being extended further if required by mutual agreement from time to time. Any contravention of the above condition will make the tenderer liable for forfeiture of his EMD/Bid Security.

2.12.2 It is understood that the tender document has been sold/issued to the Tenderer and the Tenderer is / are permitted to tender in consideration of the stipulation on her/his/their part that after submitting her/his/their subject to the period being extended further he will not resile from his offer or modify the terms and conditions thereof in a manner not acceptable to Railway. Should the Tenderer fail to observe or comply with the forgoing stipulation, the amount deposited as Earnest Money for the due performance of the above stipulation shall be forfeited by the Railways.

2.13 COMPLETION PERIOD:

- a) The time schedule for the entire work is of utmost importance. The entire work is required to be fully executed within <u>12 Months</u> from date of issue of Letter of Acceptance (LOA). The contractor shall depute adequate number of competent Engineers/qualified staff to survey, install, test and commission the equipment/system at site.
- b) Expected time schedule for supply, installation and commissioning of the System shall be as follows:
- c) Please note that Railway will provide all the arrangements as furnished vide 2.4.2 as per the requirement of the contractor. Further Railways will ensure no undue delay in arranging approvals etc.

SI.No	Description of Supply & Execution of work	Time Schedule For Completion
I	Placement of orders for all the materials	Within 2 weeks after the issue of LOA
II	Supply of Servers, Gateways, and other materials	Within 3 Months from issue of LOA
III	Commencement of Installation of racks, Power supply, etc.	Within 4 Months from issue of LOA
IV	Completion of Installation of racks, Servers, Gateways, power supply arrangements wiring	Within 6 Months from issue of LOA
V	Completion of Indoor Works such as testing of Servers & Power Supply equipment's etc.,	Within 9 Months from issue of LOA
VI	Commissioning of entire section	Within 11 Months from issue of LOA

VII Completion of whole Project including AS-MADE submission	Within 12 months from issue of LOA
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2.14 OPENING OF TENDERS

Tender will be opened online as per stipulated date and time mentioned in Tender Notice and Website in the office of <u>Deputy Chief Signal & Telecommunication Engineer/Project-I, Egmore Unit @ Chetpet, Southern Railway, Chennai-31</u> in the presence of Tenderer/ representatives (whoever chooses to attend). In the event of the specified date of bid opening being declared holiday for the Railway, the Bids shall be opened at the same time and location on the next working day. The tenderer/representatives, who are present during the opening of Bids, should sign a register as token of their attendance.

2.15 RIGHT OF RAILWAYS TO DEAL WITH TENDERS:

The authority for the acceptance of the tender will rest with the Railway administration for and on behalf of President of India, who shall not be bound to accept the lowest or any tender or to assign any reason for declining to consider, non-acceptance or rejection of a tender. Railway administration reserves the right to accept any tender in respect of the whole or any portion of the work specified in the tender document or to reduce the scope of the work or to accept any tender for less than the tendered quantities without assigning any reason whatsoever.

Railway administration also reserves the right to cancel any or all tenders at any stage. Cost of tender document will not be refundable in such cases. Railway reserves the right to accept or reject the deviations proposed by the tenderer and Railway's decision thereon shall be final. The deviation quoted by the tenderer will become part of Contract Agreement only to the extent to which they are specifically mentioned as accepted in Letter of Acceptance.

2.16 ACCEPTANCE OF TENDER:

A letter of acceptance (LOA) of the offer will be issued by the Railway Administration to the successful Tenderer that his offer has been accepted, on receipt of which he shall submit a Performance Bank Guarantee (PBG) bond of 5% of cost of work and shall execute a formal Contract Agreement with the President of India acting through Dy.CSTE/Project-I/MS, Southern Railway, Chetpet, Chennai-31 or his authorised representative for carrying out the work according to terms and conditions of the tender including "General Conditions of Contract" of Indian Railway and Special Conditions/Specifications of this tender. Upon issuing of LOA, the contract for the work shall be deemed to have been awarded to the tenderer and accordingly the completion period will be reckoned from the date of issue of LOA irrespective of the date of signing of contract agreement subsequently.

2.17 SIGNING OF AGREEMENT:

The tenderer(s) whose offer is accepted will be required to present herself/himself or her/his duly authorised representative in the office of Deputy Chief Signal & Telecommunication Engineer/Project -I, Egmore Unit, Chetpet, Southern Railway, Chennai-31 to execute the contract document within seven days of receipt of notice that the contract documents are ready. There would be no need for appear in person if agreement is signed digitally.

2.18 COMMENCEMENT OF WORK

The successful tenderer upon receipt of LOA shall commence the work by way of submitting a detailed time schedule in terms of Chapter 2 – Special Conditions of Contract, for completion of work within the stipulated completion period.

2.19 CONSIGNEE:

Consignee for the material supplied by the contractor shall be as follow:-

- Telecom items along with all accessories shall be supplied to Authorised representative of Dy.CSTE/Projects/I MS, Chetpet at the store of the nominated consignee i.e., CDMS/Stores/Perambur & SSE/OFC/TPJ.
- ii) After supply of the material by contractor, same shall be issued to contractor against indemnity Bond. Contractor shall provide proper storage space ensuring protections from theft, fire and flooding. Contractor shall obtain authorisation of Railway before transporting the material to site of work. Contractor shall submit monthly statements of material delivery/issues to site, indicating dates and quantity of equipment received and issued every month along with overall summary.
- iii) Any change/addition required in consignee, it shall be done after mutual consultation between contractor and Railway.

2.20 CONTRACTOR'S OFFICE & STORES DEPOT:

The contractor shall, within a month of issue of letter of acceptance (LOA) of tender, establish an office and store depot at a convenient place for receiving &storing equipment and materials and progressing field work expeditiously in consultation and with the approval of the Engineer-in-charge, where all correspondence should be sent. Contractor will intimate office address along with Telephone/Fax, E-mail and name of Key-personnel responsible for execution of work. Any communication sent to the contractor by post at his said address shall be deemed to have reached the contractor duly and in time. The critical document shall be sent by Registered post.

2.21 CHANGES IN ADDRESS:

Any change in the address of the contractor shall be forthwith intimated in writing to the Railway. The Railway will not be responsible for any loss/inconvenience suffered by the Contractor on account of his failure to comply with this.

2.22 SECURITY DEPOSIT:

The Security Deposit shall be 5% of the contract value. The EMD/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 fulfilment 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 EMD/Bid Security, the Railway shall return the EMD/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 total 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 8% 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.

Further, suppose Security Deposit has been submitted as Term Deposit Receipt/Bank Guarantee Bond in the total amount. In that case, the EMD/Bid Security deposited by the Contractor with his tender will be returned by the Railways.

Note:

- After the work is physically completed as certified by the competent authority, Security Deposit recovered from the running bills of a Contractor can be returned to him, if he so desires, in lieu of Term Deposit Receipt/irrevocable Bank Guarantee for equivalent amount from Scheduled Bank, to be submitted by him.
- 2) 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.

- 3) 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) No interest shall be payable upon the EMD/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 GCC will be payable with interest accrued thereon.

2.23 REFUND OF SECURITY DEPOSIT:

Security Deposit mentioned in Para 2.22 above shall be returned to the Contractor after the following:

- a) Final Payment of the Contract as per GCC Clause 51.(1)AND
- b) Execution of Final Supplementary Agreement or Certification by Engineer that Railway has No Claim on Contractor AND
- c) Issue of Maintenance Certificate on expiry of the maintenance period as per GCC clause 50.(1)
- d) Before releasing of Security Deposit, the contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at www.shramikkalyan.indianrailways.gov.in.

2.24 PERFORMANCE GUARANTEE:

The procedure for submission of 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 up to 60 days from the date of issue of LOA may be given by the Authority who is competent to sign the contract agreement. However, a penal interest of 12% per annum shall be charged for the delay beyond 21 (Twenty-one) days, i.e., from the 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. If the contract is terminated, Railway shall be entitled to forfeit EMD/Bid Security and other dues payable against that contract. Furthermore, suppose a tenderer has not submitted EMD/Bid Security on the strength of their registration as a Start-up recognized by the Department of Industrial Policy and Promotion (DIPP) under the Ministry of Commerce and Industry. In that case, DIPP shall be informed to this effect.

The failed Contractor shall be debarred from participating in re-tender for that work.

- i. The successful tenderer(s) shall submit the Performance Guarantee (PG) in any of the following forms, amounting to 5% of the original contract value:
 - 1) A deposit of Cash.
 - 2) Irrevocable Bank Guarantee.
 - 3) Government Securities including State Loan Bonds at 3% below the market value.
 - 4) Pay Orders and Demand Drafts tendered by any Scheduled Commercial Bank of India
 - 5) Guarantee Bonds executed or Deposits Receipts tendered by all Scheduled Banks.
 - 6) Deposit in the Post Office Saving Bank.
 - 7) Deposit in the National Savings Certificates.
 - 8) Twelve years National Defence Certificates.
 - 9) Ten years Defence Deposits.
 - 10) National Defence Bonds and
 - 11) Unit Trust of India Certificates at 3% below market value or at face value, whichever is less. Also, FDR in favour of FA&CAO/CN/MS (free from any encumbrance) may be accepted.
- ii. The Performance Guarantee shall be submitted by the successful tenderer(s) after the Letter of Acceptance (LOA) has been issued but before the signing of the contract agreement. This P.G. shall be initially valid up to the stipulated completion date plus 60 days beyond that. However, if 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.
- iii. 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.
- b) The Performance Guarantee (PG) shall be released after the physical completion of the work based on the 'Completion Certificate' issued by the competent authority stating that the contractor has completed the work in all respects satisfactorily. Before releasing of Performance Guarantee, the contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during

the wage period in Railway's Shramikkalyan portal at 'www.shramikkalyan.indianrailways.gov.in"

- c) The Security Deposit shall be forfeited whenever the contract is rescinded, and the Performance Guarantee shall be encashed. The balance work shall be got done independently without Risk & Cost of the failed contractor. The failed contractor shall be debarred from participating in the tender for executing the balance work. If the failed contractor is a JV or a Partnership firm, then every member/partner of such a firm shall be debarred from participating in the tender for the balance work in their individual capacity or as a partner of any other JV /partnership firm.
- d) 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.
 - iv) Details of BG shall be given in the format as shown in **Form No. 4** (in forms and annexure part of chapter 3)

2.25 PROGRAMME OF WORK EXECUTION:

- i) Time is the essence of this contract, and the time schedule shall be strictly adhered to. The entire work as per the Contract will have to be completed within 12 Months from the Date of issue of letter of acceptance, on a progressive basis. The Tenderer shall be responsible for the progress of work on a progressive basis from the date of issue of the acceptance letter. Since the progress of the work is critically related to the supply of material by the contractor, he shall be responsible for the supply of duly inspected Material on a progressive basis so that the work can be completed within the stipulated period.
- ii) The contractor shall employ an adequate number of supervisors, technicians, and supporting staff commensurate with the working area available. He will also arrange required materials and equipment to complete the job most expeditiously to ensure that the work is completed within the stipulated period and to the entire satisfaction of the Engineer in charge.

- iii) The Contractor is expected to have worked out a detailed program for execution of the work well before the issue of "Letter of Acceptance" by Railway and submit a Detailed Time and Activity Schedule within 15 days from issue of LOA, for the execution of work aiming at completing the entire work within the stipulated completion time. The Engineer-In-Charge shall thereafter approve this schedule.
- iv) Railway reserves the right to modify the schedule while approving the same as well as at any stage during execution if the situation so warrants. Once approved, in the event of any slippage from the time schedule, especially when resulting in time over-run of the work, the contractor shall submit a revised schedule duly justifying the circumstances without any delay. The Engineer-In-Charge shall approve the revised schedule only when considered justified in his opinion; otherwise, it may attract penal action on the contractor as per the provision of this contract.
- v) The Contractor shall be held responsible for the execution of the work according to the Programme given for the execution of the work in full compliance with the approved documents, drawings, and various clauses of technical specification and requirement. Failure to comply with any of these will be dealt with as per provisions of GCC.
- vi) The contractor will program his work in such a manner so as not to interfere in the working and movement of trains. No extra payment shall be allowed on this account and for taking any precautions or wastage of contractor's labour, time, etc., due to train working.
- vii) No facility whatsoever, e.g., provisions of approach road and provision of the temporary level crossing, etc., shall be provided by Railway for carting materials. However, approach roads within the Railway limits can be used for carting materials.

2.26 INSPECTION OF MATERIAL:

Manufacture premises:

- i. The Inspecting authority of the equipment/materials to be supplied against this contract shall be RDSO/RITES/Consignee, which is mentioned against each schedule of work/supplies in Chapter-4 of this tender document. Generally, the equipment materials to be supplied against this work with IRS/RDSO design or specification and TEC specification will be inspected by RDSO. However, suppose for any reason, inspections of materials are not undertaken by RDSO. In that case, the inspection may be carried out by RITES, or a Railway representative specifically nominated by the Railway for the work.
- ii. Whenever materials are inspected by Authorized Representatives of the Railways/Consignee, the Tenderer will be required to furnish manufacturers/supplier's Guarantee Certificate and performance guarantee for such items. Standard RDSO Drawing referred to in this schedule & technical specification may be collected on payment from RDSO, Lucknow by contractor, if required.

iii. The Contractor shall give sufficient time notice to RDSO/RITES/Railway's representative when the material is ready for testing/inspection. All facilities as may be necessary shall be provided for carrying out the tests.

2.27 INSPECTION CHARGES:

Inspection charges, if any levied by RDSO/Inspecting Agency shall be <u>borne by the contractor</u>. Also, the tests/analysis required from outside agencies, if any, cost of such tests/analysis shall be borne by the contractor.

2.28 MATERIALS AND WORKMANSHIP:

- Wherever RDSO specification is prescribed for any material in the tender, the same shall have to be procured from the RDSO approved/recommended firms only.
 - 2. Any material to be used for this work shall not be procured from any sources banned for business dealing with Indian Railways under any circumstances.
 - 3. If the total value of an item to be supplied as per RDSO/IRS specification is less than Rs. 5 Lakhs (Rs. Five Lakhs only), the same shall be inspected by Consignee subject to supplies being from sources approved by RDSO. However, certain specified items irrespective of value shall invariably be inspected by RDSO as per the extant policy of Indian Railways. [Railway Board Letter No: 2000/RS(G)/379/2 Dated 06.09.2017].
 - 4. If the inspection agency requires any modification from RDSO to RITES/Consignee, approval is to be taken from an officer, not below the rank of JAG.
- 5. The material should be in properly packed condition, and the consignee reserves the right to reject the material even though it was passed by RDSO/nominated inspecting authority of Railways if it is received in damaged or defective condition.
- 6. All materials shall be procured from the reputed manufacturers or their authorized dealers. Such materials are to be approved by the purchaser's Engineer. The Contractor may be required to furnish the manufacturer's test certificate along with manufacturer's/supplier's guarantee certificate wherever called for by the Engineer. The Railway may also inspect the material again at the Consignee depot.
- 7. Materials shall be procured from RDSO approved vendors as per RDSO specifications if available.
- 8. In case materials are to be inspected by consignee, then materials shall be supplied from the firms approved by not below the rank of JAG.

9. All the materials and workmanship used in this work shall be of extremely good quality and high class in every respect and is expected to give trouble-free service.

2.29 STORES - RECEIPT & ACCOUNTAL:

- i) Proper requisition and receipt exchange shall be done on a suitable Proforma as mentioned in **Form No. 6 & 7**(in Forms & Annexures part of Chapter 3) between the Contractor and the Railway's authorized representative.
- ii) The Contractor shall issue a receipt along with the demand slip for the materials required for the work and obtain a receipt when any material is returned to stores. These transactions shall be done with the consignee.
- iii) All stores drawn by the contractor shall be accounted for either as installed as per recorded site measurements or as surplus stores returned to the respective Consignee (stores).
- iv) On submitting every "on account bill," the contractor has to submit a material statement duly signed by CDMS, Concerned SSE-Incharge, and contractor to the bill passing authority.

2.30 LOADING/UNLOADING & TRANSPORTATION OF MATERIAL:

a) The Contractor shall deliver the material at the Depot of respective Consignees. Material to be supplied by Railways for the execution of the work and the material delivered by the Contractor will be transported from the Consignee depot or any other nominated depot notified by Railway to site by the Contractor at his own cost. This includes loading and unloading materials at the consignee depot and site by the contractor.

Alternatively, suppose the worksite is ready, and work is in progress, physically. In that case, the materials can be brought to the site directly and supplied with prior approval of the Engineer incharge after appropriate accounting by the consignee. Empty cable drums and balance materials after completion of work, if any, should be returned at the nominated Depot i.e., CDMS/Stores/Perambur and SSE/OFC/TPJ by the contractor at his own cost. The contractor will have to furnish an Indemnity Bond **Form No.5** (in Forms & Annexures part of Chapter-3) for the Security of the Railway material issued to him.

Indemnity Bond will be released after commissioning of work and when the contractor returns all balance material. The security of the material brought to the site of work will remain with the Contractor till commissioning.

- b) The contractor shall bear the cost of transit insurance required as per rules.
- c) The nominated depot from where Contractor has to collect the materials is from Perambur, and Tiruchirappalli stores. No payment will be made to the contractor for shifting materials from the nominated depot to the worksite.
- d) The material issued to the contractor, if found defective/unserviceable after transporting at the site, the same shall be transported & handed over to the Consignee Depot by the contractor without any extra cost.

2.31 SECURITY OF MATERIAL:

Once the material is handed over to the contractor, the contractor shall be responsible for the security of material irrespective of the fact that the material is kept in Railway premises. The contractor shall make adequate arrangements at site as deemed necessary for guarding the same from the thefts or damage of any sort. In the event of any loss, the contractor shall be responsible to that effect and shall execute an indemnity bond for the materials, which has been supplied by the Railway and will remain in his custody. The cost of stores lost/damaged shall be realized by the Railway out of any payments due to the contractor in this contract or from any other contract executed by Govt. of India.

2.32 RETURN OF SURPLUS STORES:

The Contractor shall return the stores at his own cost found to be surplus to Consignee. The contractor shall account for all material that is issued to him. A register shall be maintained at site which shall be signed by the Contractor as a token of receipt of material. All the issued material shall either be used in the installation or returned to Consignee.

2.33 RETURN OF RELEASED STORES:

Released material/equipment shall be returned and deposited to Consignee in systematic manner. Proper care of material shall be taken while releasing & transporting the stores.

2.34 PACKING AND FORWARDING:

- a) Packing shall conform to Para 14 of RDSO Specification No RDSO/SPN/144/2006 Ver 2
- **b)** The contractor shall pack at his own cost the stores sufficiently and properly for transit by Rail/Road, Air, and/or Sea as provided in the contract to ensure their being free from loss or damage on arrival at their destination.
- **c)** All containers (including packing cases, boxes, tins, drums, and wrappings) in which the contractor supplies the stores shall be considered as non-returnable and their cost as deemed to have been included in the contractor price.
- d) Each packing delivered under the contract shall be marked by the contractor at his own expenses. Such marking shall be distinct (all previous irrelevant marking being carefully obliterated and shall clearly indicate the description and quantity of stores, the name and address of the Contractor with a distinctive number of mark sufficient for the purpose of identification). All marking shall be carried out with such material as may be found satisfactory by the inspecting officer as regard quickness of drying, fastness and indelibility. Materials and Equipment meant for each section shall be separately packed in separate boxes and marked with name of section, consignee and Railway.

e) The inspecting officer may reject the store if the stores are not packed and/or marked as aforesaid and in case where the packing materials are separately prescribed, if such materials are not in accordance with the term of contract such

f) of the stores by the inspecting officer shall be binding on the contractor and he shall arrange for removal of such rejected store within 7 days.

2.35 FREIGHT AND INSURANCE:

The freight and insurance cost for the material to site of work shall be borne by the contractor.

2.36 CONSIGNEE'S RIGHT OF REJECTION:

- i) 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) 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 howsoever.
- ii) The Railway shall have full right to reject any material that the Railway may consider to be defective or inferior in quality of material, workmanship, and design or otherwise, not in accordance with the specifications and drawings specified by the Railway and the Railway's decision shall be final, even though they might have been inspected by RDSO/RITES. The contractor shall remove forthwith any such material rejected and replace them promptly at his own cost.

2.37 CONSEQUENCES OF REJECTION (Rejected stores):

When any stores delivery at the depots is rejected, the contractor shall remove this within 7 days, from the date of rejection. Such rejected stores shall lie at the consignee's risk from the date of rejection. If the Contractor does not remove the stores within this period, the Railway or his nominee shall have the right to dispose of such stores, as though fit, at the contractor's risk and account. The Railway shall also be entitled to recover from the contractor, handling and ground rent/demurrage and any other charges for the period during the rejected stores are not removed after the period aforementioned.

2.38 EXECUTION OF WORKS:

2.38.1 SPECIFICATIONS, DRAWINGS: All the work shall be executed in strict conformity to the provisions of the contract document and according to detailed drawings, specifications and instructions as may be approved from time to time by Railway and OEM, based on detailed design and engineering carried out by the contractor in line with requirements as per contract document. The contractor shall be responsible for ensuring that the work throughout are executed in the most substantial, proper and workman like manner with the quality of material and workmanship in strict accordance with the specifications and as per sound industrial practices and to the entire satisfaction of the Railway. In case of any doubts regarding any particulars of construction and any ambiguities in the plans, the decision of the Railway's Engineer shall be final and binding on the contractor

Specifications, drawings, requisites and requirements referred to in the body of this specification form an essential part thereof. The sources of the drawings & specifications referred to in this Tender, can be obtained from Engineer-incharge.

Installation shall comply with the requirements to the following Indian Railways manuals/books and respective Zonal Railway practices in vogue-Indian Railways.

- I. Signal Engineering Manual (latest edition).
- II. Indian Railways Telecom Manual
- III. Indian Railways Engineering code
- IV. Indian Railways P Way Manual
- V. Indian Railways Works Manual
- VI. Indian Railways AC traction Manual
- VII. General & Subsidiary Rules of Indian Railway and Southern Railway These books are available on the Indian Railways website and in the office of CSTE/Projects/MAS, Southern Railway, Park Town, Chennai-03.

2.38.2 SUPERVISION& LABOUR:

- i) Tenderer shall keep sufficient and competent staff as per G.C.C. Clause No.26 at the work site. The work shall be carried out as per Railway's extant practice.
- ii) Qualified Engineers may be deployed for execution of the work as per GCC conditions. Their payments/salary should not be less than the minimum wage act.
- iii) During the execution of the works, the contractor or his representative shall not leave the site where the works are being carried out. At the site of work, the contractor shall always make available one representative who shall be approved by the Railway Administration and who shall be invested with adequate powers by the Contractor so that orders or instruction given to the said representative by the Railway Administration in writing could be considered as duly given or conveyed to the Contractor himself. Representative of the Railway will check up the work from time to time. Supervision and Erection of work will be done by the contractors with their own labour, till completion and testing of the work.

iv) The field Supervisor shall receive instructions from the Engineer-in-charge of the work or his representative at site and comply with the instructions. The Contractor shall be responsible for the compliance of such instructions.

v) If the supervisor acting on behalf of the Contractor disregards the instructions of the Railway's supervisor/representative and does not execute the work to the satisfaction of this Railway supervisor, the Railway's Engineer, in consultation with superior will have the authority to order stoppage of work and/or ask for the replacement of the supervisor, which it shall be binding on the contractor.

Contract value	Deployment of Qualified Engineers	Remarks
200 Lakhs & above	One qualified Graduate Engineer to be employed	In case contractor fails to employ qualified engineer, he shall be liable to pay an amount of Rs.40,000/- for each month or part thereof for the default period.
More than 25 lakhs, but less than 200 lakhs	One qualified Diploma Holder Engineer to be employed	qualified engineer, he shall be liable

The contractor shall make his own arrangement for accommodation, for his staff during installation, testing & commissioning and till completion. Water for drinking purpose if available at the station location will be given. However, Railways take no quarantee for this facility.

- vi) Compliance of Labour Laws: To be complied as per GCC Clause 54, 55, 55-A, 55-B, 55-C, 55-D, 57 and 59(2).
- vii) Contractor is to abide by the provisions of Payment of Wages act & Minimum Wages act in terms of clause 54 and 55 of Indian Railways General Condition of Contract. In order to ensure the same, an application has been developed and hosted on website 'www.shramikkalyan.indianrailways.gov.in'. Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The Registration/ updation of Portal shall be done as under:
 - Contractor shall apply for onetime registration of his company/firm etc. in the Shramikkalyan portal with requisite details subsequent to issue of Letter of Acceptance. Engineer shall approve the contractor's registration in the portal within 7 days of receipt of such request.

- ii. Contractor once approved by any Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LOAs issued in his favour.
- iii. The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LOA) / Contract Agreements on shramikkalyan portal within 15 days of issue of any LOA for approval of concerned engineer. Engineer shall update (if required) and approve the details of LOA filled by contractor within 7 days of receipt of such request.
- iv. After approval of LOA by Engineer, contractor shall fill the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on shramikkalyan portal on monthly basis.
- v. It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.

2.38.3 SAFETY OF WORK, TRAINS & PERSONNEL:

- i) The contractor should abide by all the Railway regulations and also ensure that the same are followed by his representatives, agents, servants or workmen. He is therefore bound under these clauses to give notice to them about the provision of this clause and the consequent liability of the contractor under the agreement. The contractor shall conform to all the Railway Rules relating to safety of personnel and operation of signals and points. In the A.C. electrified areas the special precautions as laid down in AC Traction Manual shall be followed.
- ii) No petroleum spirit within the meaning of the Indian Petroleum Act shall be stored at site or adjacent land until the approval of the Railway and necessary license under the Act has been obtained by the contractor. The tenderer shall also ensure that approval of the Engineer has been obtained for storing any other inflammable material well in advance.
- iii) The contractor's employees and workers shall not for any reason operate any appliances or installations of the Railway concerning the safety of train movements, but they should whenever necessary notify the qualified Railway staff who will then take necessary steps. The contractor shall also be responsible for any damage that may cause due to the carelessness of his workmen and will bear the consequences in this regard.
- iv) The work must be carried out most carefully in such a way that they do not hinder the Railway operation except as agreed to by the Railway. The Contractor shall do no work that may interfere with traffic until protection has been provided by the Railway and under supervision of Railway's representative. When the work is required to be carried out on the track itself or as close to the track as may pose a hazard to rail traffic, the work shall be carried out under the supervision of an authorized Railway representative Junior Engineer/Senior Section Engineer (JE/SSE). Whenever trackside work

are undertaken by the contractors, areas for unloading of bulk materials should be clearly demarcated and barricades provided if necessary with the consent of the (SSE/JE) Signal/Telecom, in-charge of the work. Suitable steps shall also be taken to prevent transport vehicles and such other machinery gaining access so near the track as to threaten the safety of running trains. That, whenever it becomes inescapable to allow transport vehicles or mobile machinery to operate in close proximity to the running lines the maximum moving dimensions for the said lines shall be adequately protected by fencing or such other suitable measures. No vehicle will normally be permitted to ply adjacent to the running lines.

- v) The contractor will be responsible for the safety of hired trucks and men etc. working at the site. He will also be responsible for any damage caused to the Railway property, staff and passengers travelling on the line on account of his truck/vehicles having been allowed to ply on the bank.
- vi) The contractor shall take all precautionary measures in order to ensure protection of his own personnel moving about or working on the Railway premises and shall have to conform to the Rules and Regulations of the Railway.
- vii) Suitable ladders for climbing the post and slings for supporting men on the post shall be used. Ropes as required shall be used for erection of the poles. The size of the rope shall be adequate. The contractor shall take necessary precaution for working near the power lines. If at any time the Railway finds the safety arrangements are inadequate or insufficient, the contractor shall take immediate corrective action as directed by the Railway's representative at site. However, it is not obligatory on the part of the Railway's to give such directions. The issue or non-issue of any direction in the matter by the Railway shall in no way absolve the contractor of his sole responsibility to adopt safe working methods. The stone-breakers, if employed shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- viii) Necessary personal safety equipment as considered adequate by the Engineer-in –Charge should be kept available by the contractor for the use of the persons employed on the site and maintained in condition suitable for immediate use and the contractor should take adequate steps, to ensure proper use of equipment by these concerned. When not in use, electrical apparatus shall be switched off. No paint containing lead or lead products shall be used except in the form of paste or ready mixed paints. Suitable face masks should be supplied by the contractor for use by the workers when paint is applied in the form of spray.
- ix) Within the station premises and especially on passenger platforms, the contractor shall ensure sufficient free space for movement of passenger traffic. He must cover and protect the excavations carried out in such areas with a view to avoid any accidents.
- x) In case of an accident of any nature, the contractor will indemnify the Railway for any losses caused by him as a result of the accident.

xi) The contractor will not be entitled to any compensation for any damage or loss sustained by him during execution of the work, for any idle labour transport or

any loss or deterioration of the material or tools.

xii) During testing and commissioning, signal aspects shall be displayed or changed and slot given to adjoining cabin/ground frame only as authorized by Railway. During testing and commissioning, point setting shall be changed only as authorized by the Railway. The contractor shall do no work that may interfere with traffic until protections has been provided by the Railway and under the supervision of Railway's representative. While testing and commissioning of the system, the contractor shall not work without authorization from the Railway's Engineer in-charge of the work.

xiii) The contractor shall also be responsible for any damage that he may cause due to the carelessness of his workmen and will bear the consequences in this regard.

2.38.4 EMERGENCY WORKS:

In the event of any accident or failure occurring in or about the work or arising out of or in connection with the construction, completion or maintenance of the works which in the opinion of the Engineer requires immediate attention, the Railway may bring its own workmen or other agency to execute or partly execute the necessary work or carry out repairs if the Engineer considers that the contractor(s) is/are not in a position to do so in time and charge the cost thereof to the contractor, as to be determined by the Railway.

2.38.5 NIGHT WORKS:

Notwithstanding the provision in the General Conditions of Contract, if the Engineer is satisfied that the work is not likely to be completed in time, except by resorting to night work, he may order the contractor(s) to carry out the works even at night without conferring any right on the contractor for claiming any extra payment for the same. The contractor at his own cost shall make all adequate lighting arrangements and shall take precautions to avoid any mishap during night.

2.39 INSPECTION OF WORKS:

i) 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 of 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 for which no additional expenses will be borne by the Railway.

- ii) The responsibility of providing facilities for inspection lies with the contractor. He shall be responsible for providing required facilities i.e. tools, equipment for inspection at the place of work, for which no additional payments shall be made. For the purpose of inspection, the contractor shall make a written request for inspection of sites to be done next day.
- iii) The completed installation at all stages shall be subjected to checks and test as decided by Railways and the contractor shall be liable to remedy such defects as discovered during these checks and test and make good all deficiencies brought out. However, complete installation will be taken over finally on completion of the full system. It will be the responsibility of the contractor to rectify any discrepancy noticed within a reasonable period from the date the complete system is taken over. For the purpose of taking over, joint inspection will be carried out by nominated representative of Railways.
- iv) The contractor will be called upon to pay all the expenses incurred by the Railway in respect of any work found to be defective or of inferior quality, adulterated or otherwise unacceptable.
- v) During the execution of the contract, samples may be taken for the purpose of test and/or analysis under the conditions laid down in specification, such samples to be prepared for testing and forwarded free of all cost to the Railway.
- vi) Before the cables are actually laid, Railway's representative and the Engineer's representative shall jointly inspect the quality and depth of trenches, chases, quality of bricks and arrangements for tamped filling. The measurement of length for all these items, which is found to be suitable, will be recorded by the Engineer's representative who will permit the laying of cables after issuing the certificates that the above works have been done as per required Specifications.

vii) 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. His non-noting the logbook entries shall not be considered sufficient grounds for non-compliance of the instructions.

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 material too. This should be produced during the inspection & check of Railway engineer in charge or his authorised representative along with drawing showing new installation locations.

2.40 PROGRESS REPORTING:

i) The contractor shall submit to Railways at his own cost periodic progress reports at regular intervals regarding the state and progress of work. The details and pro-forma of the report will mutually be agreed after award of the Contract. Such reports shall be for weekly work progress (man power, equipment and work development) and monthly progress review reports. All actions as directed by Railway's representative to such reports shall be promptly attended to by Contractor.

ii) The purchaser's engineer shall also conduct monthly meetings with the contractor to assess and review the programme of works. The action proposed to progress the work as planned, difficulties, assistance required etc. shall be clearly brought out and remedial action taken. The minutes of these meetings shall be jointly signed by Railway and contractor.

2.41 CLEARANCE OF SITE:

- 2.41.1 Contractor at his own expenses clean the site, set out all works and provide all necessary labours, pets, string, steel to enable the Railways or any of his representatives to check all setting out and the contractor will correct all errors at his own expenses.
- 2.41.2 At the end of the work in each section the contractor shall as a part of his contractual obligation leave the area completely cleared of rubbish and obstruction of all kinds according to the instructions of the Railway's representatives. Besides, he shall take execution of work to avoid the presence of loose earth and ballast on platforms, in drains, on the track formation and pathways, in the vicinity. If within fortnight of completion of the particular item of site work, the refuge is not cleared, the Railway, will arrange to get them removed at the cost of the contractor. However, before the Railway actually gets the site cleared, intimation in writing shall be given to the Contractor.
- 2.41.3 Offloading of Part(s) of Work: At the final stage of completion/ commissioning of work, in case the contractor fails to complete the final part(s) of the work and the value of such part(s) of the work is limited to 5% of the original contract value, the Engineer may allow/decide for offloading of such part(s) of works, either after the Contractor's request in writing to do so or after serving a 14 (Fourteen) days suo-moto notice (as per annexure- VIIA of GCC), if the Engineer is of the opinion that:-
 - (i) Such Offloading of works (up to 5% of original contract value) would enable successful completion of contract/work,
 - (ii) Termination/ Part termination of the contract at this stage is not be in the interest of the Railway/work;, and
 - (iii) The anticipated additional cost for execution of such works through other mode would not be substantial and can be recovered from the pending dues of the contractor;

The Contractor shall be informed, in due course, by the Engineer of the mode and cost of execution of such offloaded work through other agency(ies) (as per annexure- VIIB of GCC). The extra expenditure so incurred in execution of the offloaded work, shall be recovered from subsequent Bill(s) or any other dues of the Contractor, but not exceeding the value of Performance Guarantee available in the contract. There shall be no other repercussion of such offloading on execution of the balance contract. The Contractor shall have no claim on account of above mentioned offloading of works.

2.42 COMPLETION OF WORKS:

As soon as in the opinion of the Engineer, the work has been completed (i.e, which will be considered as date of commissioning of complete system), the Engineer shall issue a completion certificate duly indicating the date of completion in respect of the work and the warranty period of the work shall commence from the date of completion mentioned in such certificate.

The certificate of completion in respect of the works shall not absolve the contractor from his liability to make good any defects imperfections, shrinkages or faults which may appear during the period of maintenance specified in the tender arising in the opinion of the Engineer from materials or workmanship not in accordance with the drawings or specifications or instruction of the Engineer, which defects, imperfections, shrinkages or faults shall upon the direction in writing of the Engineer be amended and made good by the contractor at his own cost; and in case of default on the part of contractor, the Engineer may employ labour and materials or appoint another contractor to amend and make good such defects, imperfections, shrinkages and faults and all expenses consequent thereon and incidental thereto shall be borne by the contractor and shall be recoverable from any moneys due to him under the contract.

2.43 WARRANTY:

Contractor is responsible for Warranty of all the materials supplied and installed by him for a period of ONE year from date of issue of completion certificate, which will be considered as date of commissioning of complete system. Completion certificate will be issued by JAG officer after obtaining "No Due" certificate from SSE-Incharge stating that all works are completed in all respects.

During the period of warranty contractor shall be responsible for:

- i) The contractor shall guarantee that all material & equipment to be supplied and installed as per this contract shall be free from defect and fault in design, material, workmanship and manufacture and shall be of the highest grade and consistent with established and generally accepted standard for materials of the type ordered and in full conformity with the contract specification.
- ii) 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 contractor and under proper use, arising from faulty materials, design or

workmanship on the plant or from faulty erection of the equipment under the supervision of the contractor, but not to do so by the purchaser who shall state

in writing in what the portion is faulty.

iii) 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 become unworkable due to any cause whatsoever. The decision to attend to any damage or defect in work shall be final and binding on the contractor.

- iv) If it becomes necessary for the contractor to replace or renew any defective portions of the system under this clause, the provision of the above clauses shall apply to the replaced/renewed equipment for the period of six months from the date of such replacement or renewal or until date of 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 expenses, but without prejudice to any other rights, which the Railway may have against the contractor in respect of such defects.
- v) If the replacement or renewals are of such a character as may affect the efficiency of the system, the Railway shall have the right to give the contractor within one month from such replacement or renewal notice in writing that test on completion will be carried out at his cost. Should such tests show that the plant sustains the guarantee in the contract; the cost of the tests shall be borne by the purchaser. Should the guarantees not be sustained, the cost of the tests shall be borne by the contractor.
- vi) Until the completion of work, the contractor shall have the right to entry with permission of Railways, at his own risk and representatives, whose names shall have previously been communicated, in writing, to the Railways at all reasonable working hours upon all necessary parts of the works for the purpose of inspecting the working and the records of the plant and taking notes there from and if he desires at his own risk and expense, making any tests, subject to the approval of the purchaser which shall not be unreasonably withheld.
- vii) All inspections, replacement or renewals carried out by the Contractor during the maintenance period shall be subject to the same condition of the contract.
- viii) All replacement and repairs and design change that the railway shall call upon the contractor to deliver or perform under this warranty period shall be delivered and performed by the contractor within three months, promptly and satisfactorily.
- ix) 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.
- x) During failure analysis/de-bugging, if any design deficiency is pointed out by the Railway, the contractor shall rectify it at his own cost.

xi) Permissible window period for attending the defects:

SN	TYPE OF EQUIPMEN T	TIME OF RECTIFICATION OF FAILURE	PENALTY for Non- Compliance
1	VOIP TCCS		
	All servers	4 Hrs. from intimating the failure on given address of communication in this Tender.	Rs. 2000/- per Day per item
	All Switches Gateways and consoles	24 Hrs. from intimating the failure on given address of communication in this Tender.	Rs. 500/- per Day per Switch
	IP telephones	24 Hrs. from intimating the failure on given address of communication in this Tender.	Rs. 100/- per Day per device
		12 Hrs. from intimating the failure on given address of communication in this Tender.	Rs. 200/- per day for per UPS

Note: The first line of maintenance/failure attendance will be done by the railway. If the above time of rectification is not complied with due to a failure not caused by the railway, then the applicable money will be deducted from the S.D amount. The decision to deduct money from the S.D against non-compliance of the time of rectification will be decided by the engineer incharge depending upon the merit of the case. The engineer in-charge's decision in this regard will be final.

2.44 VARIATION IN CONTRACT QUANTITIES:

In addition to Clause 42 of GCC. The procedure detailed below shall be adopted for dealing with variations in quantities during execution of works contracts.

Individual Items in the contract shall be operated with quantity variation of plus or minus 25%, and payment would be made as per the agreement rate. In case an increase in the quantity of an individual item by more than 25% of the agreement quantity is considered unavoidable, then the same shall be executed at the following rates

- (a) The contractor shall be bound to carry out the work at the agreed rates and shall not be entitled to any claim or any compensation whatsoever upto the limit of 25% variation in quantity of individual items of works.
- (b) Quantities operated in excess of 125%, but upto 140% of the agreement quantity of the concerned item, shall be paid at 98% of the rate awarded for that item in that particular tender.

(c) Quantities operated in excess of 140%, but upto 150% of the agreement quantity of the concerned item shall be paid at 96% of the rate awarded for that item in that particular tender.

- (d) Variation in quantities of individual items beyond 150% will be avoided and permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
- (e) Variation to quantities of Minor Value Item:

The limit for varying quantities for minor value items shall be 100% (as against 25% prescribed for other items). For this purpose, a minor value item is defined as an item whose original agreement value is less than 1 % of the total original contract value.

- i. Quantities operated upto and including 100% of the agreement quantity of the concerned minor value item shall be paid at the rate awarded for that item in that particular tender.
- ii. Quantities operated in excess of 100%, but upto 200% of the agreement quantity of the concerned minor value item shall be paid at 98% of the rate awarded for that item in that particular tender;
- iii. Variation in quantities of individual minor value items beyond 200% will be avoided and permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
- (f) No variation limit shall apply in the case of foundation work, and the Contractor shall carry out the work at agreed rates irrespective of any variation.
- (g) As far as Standard SOR items are concerned, the variation limit of 25% would apply to the value of the SOR schedule(s) as a whole and not on individual SOR items. However, in the case of NS items, the limit of 25% would apply on the individual items irrespective of quoting the rate (single percentage rate or individual item rate).
- (h) Execution of quantities beyond 150% of the overall agreement value should not be permitted and, if found necessary, should be only by negotiating with a contractor, with the prior personal concurrence of Principal FA&CAO/FA&CAO(C) and approval of General Manager
- (i) In cases where the decrease is involved during execution of the contract:
 - i) The contract signing authority can decrease the quantities of items up to 25% of the individual item.
 - ii) For a decrease beyond 25% for individual items or 25% of contract agreement value, the approval of an officer not less than the rank of S.A.

Grade may be taken after obtaining "No Claim Certificate" from the contractor and with finance concurrence.

Note:

1) In case of need for the introduction of any new items (New NS Items) not covered in the schedule of quantities and rates to provide for any additional activity not covered in the original scope of contract shall be done at the rates, terms, and conditions mutually decided between Railway and contractor. The assessment of rates for extra item(s) shall be arrived at based on the prevailing market rates of labour, machinery & materials and by taking guidance from the following documents in order of priority:

- i) S&T SOR from Different Zonal Railways if available
- ii) Market Analysis
- 2) In case there is a need for introducing SOR items that are originally not available in the tender and further required to be included as per site conditions. Then the rate for such New SOR items shall be applicable at the same originally accepted percentage by the contractor and Railways. However, the cumulative value of all such extra item(s) together (modified by the respective tender percentage) shall not exceed 10 % of the original contract value.

2.45 PRICE VARIATION CLAUSE:

As per GCC correction slip No.1, Price Variation Clause (PVC) shall be applicable only in tender having advertised value above Rs.2 Crores. Provided further that, in a contract where PVC is applicable, following shall be outside the purview of price adjustments. under clause 46A of GCC 2022(i.e., shall be excluded from the gross value of the work for the purpose of price variation):

- a) Materials supplied by Railway to the Contractors, either free or at fixed rate.
- b) Any extra item(s) included in subsequent variation falling outside the purview of the Bill(s) of Quantities of tender, under clause 39. (1)(b) of these Standard General Conditions of Contract, unless applicability of PVC and 'Base Month' has been specially agreed, while fixing the rates of such extra item(s).
- 2.45.1 **Base Month:** The Base Month for 'Price Variation Clause' shall be taken as the one month prior to closing of tender, unless otherwise stated elsewhere. The quarter for applicability of PVC shall commence from the month following the Base month. The Price Variation shall be based on the average Price Index of the quarter under consideration.
- 2.45.2 **Validity:** Rates accepted by Railway Administration shall hold good till completion of work and no additional individual claim shall be admissible except:
 - (a) Payment/recovery for increase/decrease in GST on works contract or imposition/removal of any tax/cess on Works Contract as per Clause 37,
 - (b) Payment/recovery for overall market situation as per Price Variation Clause given hereunder.

- 2.45.3 Components of various items in a contract on which variation in prices be admissible, shall be steel, cement, ferrous material, non-ferrous material, insulators, zinc and other materials, labour, plant & machinery, fuel, explosives, detonators etc. Adjustment for variation in prices of these items shall be determined in the manner prescribed.
- 2.45.4 No price variation shall be admissible for fixed components
- 2.45.5 The percentages of various components in various type of works shall be as specified for all item (s)/ Bill(s) of Quantities in tender document and the same shall be fixed as per table & classifications given below:
 - (a)The following expressions and meanings are assigned to the value of the work done for

signalling and telecommunication works:

SIGWK = Value of signalling works for a stage payment of the item signalling works:

INVSIG = Value of inventory for signalling works for a stage payment of the item inventory

for signalling works;

INTGTESTSIG = Value of integrated testing and commission for signalling works of the

Railway Project;

COMWK= Value of telecommunication works for a stage payment of the item telecommunication works;

INVCOM = Value of inventory for telecommunication works for a stage payment of the item

inventory for telecommunication works; and

INTGTESTCOM = Value of integrated testing and commission for telecommunication works of the Railway Project.

- (b) Price adjustment for changes in cost of signalling works and telecommunication works shall be paid in accordance with the following formula:
 - (i) VSIGWK = 0.85 SIGWK x [PELEX x (ELEXi ELEXo)/ ELEXo + POFC x (OFCi– OFCo)/OFCo + PLB x (LBi LBo)/LBo + POTH x (OTHi OTHo)/OTHo + S30Cx (P30Ci P30Co)/ P30Co + S24C x (P24Ci P24Co)/ P24Co + S19C x (P19Ci P19Co)/ P19Co + S12C x (P12Ci P12Co)/ P120Co + S9C x (P9Ci P9Co)/ P9Co + S6C x (P6Ci P6Co)/ P6Co + S4C x (P4Ci P4Co)/ P4Co + S2C x (P2Ci P2Co)/P2Co + S12C2.5 x (P12C2.5i P12C2.5o)/ P12C2.5o + S2C2.5 x (P2C2.5i P2C2.5o)/ P2C2.5o + S2C25 x (P2C25i P2C25o)/ P2C25o + QC x (PQCi PQCo)/ PQCo;

- (ii) VINVSIG = 0.85 SIGWK x [PELEX x (ELEXi ELEXo)/ ELEXo + POTH x (OTHi OTHo)/OTHo];
- (iii) VINTGTESTSIG = 0.85 INTGTESTSIG x [PLB x (LBi LBo)/LBo + POTH x (OTHi- OTHo)/OTHo];
- (iv) VCOMWK = 0.85 COMWK x [PELEX x (ELEXi ELEXo)/ ELEXo + POFC x (OFCi OFCo)/OFCo + PLB x (LBi LBo)/LBo + POTH x (OTHi OTHo)/OTHo + S30C x (P30Ci P30Co)/ P30Co + S24C x (P24Ci P24Co)/ P24Co + S19C x (P19Ci P19Co)/ P19Co + S12C x (P12Ci P12Co)/ P120Co + S9C x (P9Ci P9Co)/ P9Co + S6C x (P6Ci P6Co)/ P6Co + S4C x (P4Ci P4Co)/ P4Co + S2C x (P2Ci P2Co)/ P2Co+ S12C2.5 x (P12C2.5i P12C2.5o)/ P12C2.5o + S2C2.5 x (P2C2.5i P2C2.5o)/ P2C2.5o + S2C25 x (P2C25i P2C25o)/ P2C25o + QC x (PQCi PQCo)/ PQCo+ PCEQP x (CEQPi CEQPo)/CEQPo];
- (v) VINVCOM = 0.85 SIGWK x [PELEX x (ELEXi ELEXo)/ ELEXo + PCEQP x (CEQPi CEQPo)/CEQPo + POTH x (OTHi OTHo)/OTHo]; and
- (vi) VINTGTESTCOM = 0.85 INTGTESTCOM x [PLB x (LBi LBo)/LBo + POTH x (OTHi OTHo)/OTHo].

Where

VSIGWK = Increase or decrease in the cost of signalling works during the period under consideration due to changes in the rates for relevant components as specified in subparagraph (h);

VINVSIG = Increase or decrease in the cost of inventory for signalling during the period under consideration due to changes in the rates for relevant components as specified in subparagraph (h);

VINTGTESTSIG = Increase or decrease in the cost of integrated testing and commissioning of signalling works of the Railway Project during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (h);

VCOMWK = Increase or decrease in the cost of communication works during the period under consideration due to changes in the rates for relevant components as specified in subparagraph (h);

VINVCOM = Increase or decrease in the cost of inventory for telecommunications works during the period under consideration due to changes in the rates for relevant components as specified in sub-paragraph (h);

VINTGTESTCOM = Increase or decrease in the cost of integrated testing and commissioning of telecommunication works of the Railway Project during the period under

consideration due to changes in the rates for relevant components as specified in subparagraph (h);

PCEQP, PELEX, PIC, PLB, POFC, and POTH are the percentages of communication equipment, electronics, PVC insulated cables, labour, optical fibre cables, and other materials respectively;

CEQPo = The wholesale price index as published by the Ministry of Commerce and Industry, Government of India (hereinafter called "WPI") for communication equipment for the month of the Base Month;

CEQPi = The WPI for communication equipment for the average price index of the 3 months of the quarter under consideration;

ELEXo = The WPI for electronics for the month of the Base Month;

ELEXi = The WPI for electronics for the average price index of the 3 months of the quarter under consideration;

P30Ci = Price payable per Km as adjusted in accordance with price variation Clause for size 30C x 1.5 sq mm signalling cable

P30Co = Price per Km of cable as per purchase order/ Contract agreement.

S30C = Percentage of size 30C x 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

P24Ci = Price payable per Km as adjusted in accordance with price variation Clause for size 24C x 1.5 sq mm signalling cable

P24Co = Price per Km of cable as per purchase order/ Contract agreement.

S24C = Percentage of size 24C x 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

P19Ci = Price payable per Km as adjusted in accordance with price variation Clause for size 19C x 1.5 sq mm signalling cable

P19Co = Price per Km of cable as per purchase order/ Contract agreement.

 $S19C = Percentage of size 19C \times 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.$

P12Ci = Price payable per Km as adjusted in accordance with price variation Clause for size 12C x 1.5 sq mm signalling cable

P12Co = Price per Km of cable as per purchase order/ Contract agreement.

S12C = Percentage of size 12C x 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

P9Ci = Price payable per Km as adjusted in accordance with price variation Clause for size 9C x 1.5 sq mm signalling cable

P9Co = Price per Km of cable as per purchase order/ Contract agreement.

 $S9C = Percentage of size 9C \times 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.$

P6Ci = Price payable per Km as adjusted in accordance with price variation Clause for size 6C x 1.5 sq mm signalling cable

P6Co = Price per Km of cable as per purchase order/ Contract agreement.

S6C = Percentage of size 6C \times 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

P4Ci = Price payable per Km as adjusted in accordance with price variation

Clause for size 4C x 1.5 sq mm signalling cable P4Co = Price per Km of cable as per purchase order/ Contract agreement.

S4C = Percentage of size 4C \times 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

P2Ci = Price payable per Km as adjusted in accordance with price variation Clause for size 2C x 1.5 sq mm signalling cable

P2Co = Price per Km of cable as per purchase order/ Contract agreement.

 $S2C = Percentage of size 2C \times 1.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.$

P12C2.5i = Price payable per Km as adjusted in accordance with price variation Clause for size 12C x 2.5 sq mm signalling cable

P12C2.50 = Price per Km of cable as per purchase order/ Contract agreement.

S12C2.5 = Percentage of size 12C x 2.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

P2C2.5i = Price payable per Km as adjusted in accordance with price variation Clause for size 2C x 2.5 sq mm signalling cable

P2C2.50 = Price per Km of cable as per purchase order/ Contract agreement.

S2C2.5 = Percentage of size 2C x 2.5 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

P2C25i = Price payable per Km as adjusted in accordance with price variation Clause for size 2C x 25 sq mm signalling cable

P2C250 = Price per Km of cable as per purchase order/ Contract agreement.

S2C25 = Percentage of size 2C x 25 sq mm signalling cable shall govern the price adjustment of the contract price for signalling and telecommunication works.

PQCi = Price payable per Km as adjusted in accordance with price variation Clause for size 0.9mm dia, 6 Quad cable.

PQCo= Price per Km of cable as per purchase order/ Contract agreement.

QC = Percentage of size 0.9mm dia, 6 Quad cable shall govern the price.

LBo = The consumer price index for industrial workers – All India, published by Labour Bureau, Ministry of Labour, Government of India, (hereinafter called "CPI") for the month of the Base Month;

LBi = The CPI for industrial workers – All India for the average price index of the 3 months of the quarter under consideration;

OFCo = The WPI for fibre cables for the month of the Base Month;

OFCi = The WPI for fibre cables for the average price index of the 3 months of the quarter under consideration;

OTHo = The WPI for all commodities for the month of the Base Month; and

OTHi = The WPI for all commodities for the average price index of the 3 months of the quarter under consideration.

The following percentages shall govern the price adjustment of the Contract Price for signalling and telecommunication works:

Category	Signalling Works	Signalling inventory	Integrated testing and Commissioning - Signalling	Telecommunication Works	Telecomm inventory	Integrated testing and Commissioning - Telecom	Total
Electronics (PELEX)	-	-	-	20.51%	0.44%	-	5.52%
Communication Equipment (PCEQP)	-	-	-	26.80%	93.77%	-	71.30%
Optical Fibre Cable (POFC)	ı	ı	-	2.30%	-	-	0.58%
30C x 1.5 sq mm signalling cable(S30C)	-	-	-	-	-	-	-
24C x 1.5 sq mm signalling cable (S24C)	-	-	-	-	-	-	-
19Cx 1.5 sq mm signalling cable (S19C)	-	-	-	-	-	-	-
12C x 1.5 sq mm signalling cable (S12C)	-	-	-	-	-	-	-
9C x 1.5 sq mm signalling cable (S9C)	-	-	-	-	-	-	-
6C x 1.5 sq mm signalling cable (S6C)	-	-	-	-	-	-	-
4C x 1.5 sq mm signalling cable (S4C)	1	ı	1	-	-	-	-
2C x 1.5 sq mm signalling cable (S2C)	-	-	-	-	-	-	-
12C x 2.5 sq mm signalling cable (S12C2.5)	-	-	-	-	-	-	-
2C x 2.5 sq mm signalling cable (S2C2.5)	-	-	-	-	-	-	-
2C x 25 sq mm signalling cable (S2C25)	-	ı	-	-	-	-	-
0.9 mm dia, 6Quad cable (QC)	-		-	-	-	-	-
Labour (PLB)	-	-	-	28.11%	-	100%	12.96%

Other materials	-	-	-	22.28%	5.79%	-	9.64%
Total Amount				100.00%	100.00%	100.00%	100.00%

FORMULAE FOR SIGNALING & TELECOM CABLE

The price payable for signalling cables is variable as per Price Variation Formula given

below:

For Signalling Copper Cables:

Pi= Po+CuF (Cu-Cuo) + CCFcu(CC-CCo) + FeF (Fe-Feo)

For Telecom Copper Cables For Jelly Filled, 0.9 mm dia, 6 quad cable

Pi= Po+CuF (Cu-Cuo) + AlFcu(Al-Alo) + CCFcu (CC-Cco) + FeF (Fe-Feo)

For Aluminium Power Cables:

Pi= Po+AIF (AI-Alo) + CCFAI(CC-CCo) + FeF (Fe-Feo)

Where,

Pi= Price payable per KM as adjusted in accordance with Price variation clause.

Po= Price per KM of cable as per Purchase order.

CuF= Variation factor for Copper

Cuo= Price of copper Rod in Rs. Per MT

CCFCu= Variation factor for PVC Compound for Copper Signalling & Telecom cable

CCo= Price of PVC Compound in Rs. Per MT

AIF= Variation factor for Aluminium

Alo= Price of EC grade LME Aluminium rods (Properzi rods) in Rs. Per MT.

CCFAI = Variation factor for PVC Compound for Aluminium power cable

FeF= Variation factor for Steel

Feo= Price of Steel for Armour (Flat strip 4 mm. x 0.8mm/ Round 1.4mm dia) in Rs.

Per

MT

(Prices per MT for Cuo, CCo, Feo, Alo as applicable on the 1st working day of the month, one month prior to the deadline for submission of bids. The above prices and indices are as published by IEEMA vide circular reference no. IEEMA (PVC)

/CABLE --/-- one month prior to the deadline for submission of bids.)

Cu= Price of Copper Rod in Rs. Per MT.

CC= Price of PVC Compound in Rs. Per MT.

Fe= Price of Steel for Armouring (Flat strip 4mm x 0.8 mm/ Round 1.4mm dia) in Rs. Per MT.

Al = Price of EC grade LME Aluminium rods (Properzi rods) in Rs. Per MT.

(Prices per MT for Cu, CC, Fe, Al as prevailing on 1stworking day of the calendar month covering the date One month prior to the date of inspection call letter will be applicable for the calculation of updated price. The above prices and indices are as published by IEEMA vide circular reference no. IEEMA (PVC) /CABLE --/--- one month prior to the date of inspection.)

The value of variation factors for copper, steel and PVC Compound are different for different sizes of signalling cables. Accordingly, the PVC formula for some of the types

of signalling cable is as given under:-

Underground Railway Signalling Cable unscreened and armoured copper conductor

P30Ci=P30Co+0.391(Cu-Cuo) +0.557(CC-CCo) +0.425(Fe-Feo)

For armouring, price of steel flat strip of size 4mmx0.8mm is to be taken into consideration.

(ii) Size 24C x 1.5 sq.mm

(i) Size 30 C x 1.5 sq.mm.

P24Ci= P24Co+0.313(Cu-Cuo) + 0.481 (CC-CCo) +0.398(Fe-Feo)

For armouring, value of steel flat strip of size 4mmx0.8mm is to be taken into consideration.

(iii) Size 19C x 1.5 sq.mm

P19Ci= P19Co+0.248(Cu-Cuo) + 0.395(CC-CCo) +0.343(Fe-Feo)

For armouring, value of steel flat strip of size 4mmx0.8mm is to be taken into consideration.

(iv) Size 12C x 1.5 sq.mm

P12Ci=P12Co+0.157(Cu-Cuo) + 0.277(CC-CCu) +0.289(Fe-Feo)

For armouring, value of steel wire size 1.4mm dia is to be taken into consideration.

(v) Size 9C x 1.5 sq.mm

P9Ci= P9Co+0.117(Cu-Cuo) +0.241(CC-CCu) +0.383(Fe-Feo)

For armouring, value of steel wire size 1.4mm dia is to be taken into consideration.

(vi) Size 6Cx 1.5 sq.mm

P6Ci= P6Co+0.078(Cu-Cuo) +0.199(CC-CCu) +0.329(Fe-Feo)

For armouring, value of steel wire size 1.4mm dia is to be taken into consideration.

(vii) Size 4Cx1.5 sq.mm

P4Ci=P4Co+0.052(Cu-Cuo) +0.152(CC-CCo) +0.277(Fe-Feo)

For armouring, value of steel wire size 1.4mm dia is to be taken into consideration.

(viii) Size 2C x 4 sq.mm(multistrand)

P2Ci= P2Co+0.073(Cu-Cuo) +0.156(CC-CCo) +0.3(Fe-Feo)

For armouring, value of steel wire size 1.4mm dia is to be taken into consideration.

(ix) Size 12C x 2.5 sq.mm

P12C2.5i= P12C2.5o+0.282 (Cu-Cuo) +0.371 (CC-CCo) +0.342 (Fe-Feo)

For armouring, value of steel flat strip of size 4mmx0.8mm is to be taken into consideration.

(x) Size 2C x 2.5 sq.mm

P2C2.5i= P2C2.5o+0.047 (Cu-Cuo) +0.139 (CC-CCo) +0.277 (Fe-Feo)

For armouring, value of steel wire size 1.4mm dia is to be taken into consideration.

(xi) Size 2C x 25 sq.mm PVC insulated, armoured, Aluminium power cable

P2C25i= P2C25o+0.146 (Al-Alo) +0.303 (CC-CCo) +0.306 (Fe-Feo)

For armouring, value of steel flat strip of size 4mmx0.8mm is to be taken into consideration.

(xii) For Jelly filled, 0.9mm dia, 6 quad cable

PQCi = PQCo + 0.135 (Al-Alo) + 0.139 (Cu-Cuo) + 0.515 (CC-Cco) + 0.693 (FeFeo).

For PVC Compound Grade CW-22, is to be taken into consideration.

- 2.45.6 The demands for escalation of cost shall be allowed on the basis of provisional indices as mentioned above in Clause 46A.7. Any adjustment needed to be done based on the finally published indices shall be made as and when they become available.
- 2.45.7 (1) Relevant categories of steel for the purpose of operating Price Variation formula as mentioned in this Clause shall be as under:

SL	Classification	Rates to be used for calculating SQ or SB
1	Reinforcement bars	Average of per tonne rates of 10mm dia TMT
	and other rounds	& 25mm dia TMT; confirming IS1786; Fe 500
2	All types and sizes of	Average of per tonne rates of 'Angle
	angles, channels and	75x75x6mm, Mild Steel Plate 10mm
	joists	thickness and Channel 150x75mm;
		confirming IS2062, E250 Gr "A"
3	All types and sizes of	Average of per tonne rates of 'MS Plates
	plates	10mm thickness and 25mm thickness;
		confirming IS2062, E250 Gr "A"
4	Any other section of	Average of price for the 3 categories covered
	steel not covered in	under SL 1, 2 & 3 in this table.
	the above categories	

(2) Relevant city for referring "JPC (Joint Plant Committee)" rates of steel items (SQ /SB) in different Zonal Railways shall be as under:

SL	City	Railway
1	Delhi	Northern , North Central, North Eastern,
		North Western
2	Kolkata	Eastern, East Central, East Coast,
		Northeast Frontier, South Eastern,
		Southeast Central
3	Mumbai	Central, Western, West Central
4	Chennai	Southern, South Central & South Western

2.46 RIGHT OF RAILWAYS TO KEEP BACK FROM THE CONTRACT ANY PORTION OF WORK:

The successful tenderer will, however, have no claim or right in the execution of work which in the opinion of the Engine

er should be carried out departmentally or otherwise, and the Railway reserves the right to keep back from the contract and carry out the work or any portion of work through any other agency, it may think without assigning any reason, any time after the acceptance of the tender. Therefore, no claim for compensation/loss or whatsoever on this account will be entertained by the Railway. In case if tender is accepted in part by Railway administration, Letter of Acceptance shall be issued as counter offer to the Tenderer, which shall be subject to acceptance by the Tenderer.

2.47 APPROVAL AND MEASUREMENT OF WORK: (Measurement of Works by Railway only)

- The contractor shall obtain written approval of the Railway supervisor after completion of the various sub-items of each work mentioned in the schedule. The contractor should ensure that correct measurements have been made for such work which are not possible to measure subsequently and shall remain hidden. E.g. Measurement of cable trench before laying of cables and back filling.
- ii) The contractor shall sign the measurement book as a token of acceptance of the measurement entered by the supervisor in-charge of the work.
- measurements, method of measurement, meaning and intent of specifications and interpretation of Special Conditions of Contract, given and made by the Railways or by the Railway's Engineer shall be final and binding and shall be considered "excepted matter" (matters not arbitrable) in terms of conditions laid down in the General Conditions of Contract.
- The date and time on which 'on account' or 'final' measurements are to be made shall be communicated to the Contractor who shall be present at the site and shall sign the results of the measurements (which shall also be signed by the Engineer or the Engineer's representative) recorded in the official measurements book as an acknowledgement of his acceptance of the accuracy of the measurements. Failing the Contractor's attendance, the work may be measured up in his absence and such measurements shall, notwithstanding such absence, be binding upon the Contractor whether or not he shall have signed the measurement books provided always that any objection made by him to measurement shall be duly investigated and considered in the manner set out below:
 - (a) It shall be open to the Contractor to take specific objection to any recorded measurements or Classification on any ground within seven days of the date of such measurements. Any re-measurement taken by the Engineer or the Engineer's representative in the presence of the Contractor or in his absence after due notice has been given to him in consequence of objection made by the Contractor shall be final and binding on the Contractor and no claim whatsoever shall thereafter be entertained regarding the accuracy and Classification of the measurements.
 - (b) If an objection raised by the Contractor is found by the Engineer to be incorrect the Contractor shall be liable to pay the actual expenses incurred in measurements.

2.48 EXTENSION OF COMPLETION PERIOD:

Extension to the contract will be granted by Railways as per Clause of GCC 17-A & 17B including correction slips.

Note: In case Extension for Delay is due to Railways i.e., Clause 17A, then Railways may grant such extension or extensions of the completion date as may be considered reasonable. The Contractor shall indicate the period for which the work is likely to be delayed and shall seek extension of time as may be considered necessary under clause 17A(i) or/and 17A(ii) or/ and 17A(iii) above, as soon as the cause thereof shall arise and, in any case, not less than 15 days before the expiry of the date fixed for completion of the works. The Engineer shall consider the same and shall grant and communicate such extension of time as in his opinion is reasonable having regard to the nature and period of delay and the type and quantum of work affected thereby. No other compensation shall be payable for works so carried forward to the extended period of time; the same rates, terms and conditions of contract being applicable, as if such extended period of time was originally provided in the original contract itself. The non-submission of request for extension or submission of request within less than 15 days before the expiry of the date fixed for completion of the works, shall make him ineligible for extension under these sub clauses, subject to final decision of Engineer.

2.49 LOSS SUSTAINED DUE TO DEFAULT AND DELAY:

In the event of any loss to the Railways on account of execution and/or delay in completion of the work or any part thereof by agencies engaged by the contractor, the contractor shall be liable to reimburse the loss to purchaser without prejudice to the other rights and remedies of the purchaser, and the reimbursement in full or in part as the case may be, shall be met, at the option of the purchaser from out of all or any of the following sources viz:

- i) Any amount due and payable to the contractor by the purchaser on any account whatsoever;
- ii) The Contractor's security deposit in hands of the purchaser as far as available, and any other assets whatsoever of the contractor;

In the event of re-imbursement from out of sources (i) and/or (ii) above mentioned, the Railway shall have the right of appropriation suo-moto.

2.50 CONTRACTOR'S LIABILITIES FOR COST AND DAMAGES

Withholding and lien in respect of sums claimed will be applicable as per Clause of GCC 52 & 52-A.

2.51 SYSTEM OF QUOTING RATES:

The Tender consists of Two Schedules i.e., Schedule-A SOR items, Schedule-B Non-SOR items. Tenderer has to quote single percentage for schedule A and individual rate for each item in schedule B.

The prices quoted by the Tenderer shall include the prices of materials including all incidental charges for transport, packing, loading/unloading and handling of materials, cost for arranging dispatch by rail/road direct from manufacturer's premises and completing all necessary formalities in all

respect. The prices shall include all taxes, duties, insurance, Royalty, land levies applicable to this Works Contract. <u>Therefore, tenderer should quote their prices taking into account the rate of GST as applicable for this contract as per extant Government orders from time to time.</u>

- a) The Unit prices offered against the various items in schedules will include beside labour the following elements of cost:
 - i. Cost of all materials required for preparing the cable routes, laying the cables and all other incidentals connected therewith excluding the materials supplied by the Railways.
 - ii. Special tools & installation materials for cable laying etc.,
 - iii. Cost of transportation of material, supplied by the Railway from place of delivery to the site of work.
 - iv. Return of released materials, left over cables and other materials from the site of work and handing over to the Engineer at specified locations or stores depot.
 - v. Return of damages materials due to transportation.
 - vi. Cost of preparation of detailed documentation, completion plans/drawings.
- vii. All other miscellaneous expenses necessary for the execution of work and fulfilment of contractual obligation.
- viii. Conditions for reimbursements of levy/tax/cess if levied after receipt of tenders.
- b) Before submitting a tender, the tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that the rates enters in the tender forms are adequate and all-inclusive to accord with the provisions in Clause-37 of the standard GCC (Annexure 4 of Chapter 3) for the completion of works to the entire satisfaction of the engineer.
- c) Tenderers will examine the various provisions of the Central Goods and Services Tax Act, 2017(CGST)/ Integrated Goods and Services Tax Act, 2017(IGST)/Union Territory Goods and Services Tax Act, 2017(UTGST)/ respective state's state Goods and Services Tax Act (SGST) also as notified by Central/State Govt& as amended from time to time and applicable taxes before bidding. Tenderers shall ensure that full benefit of input Tax Credit (ITC) likely to be availed by them is duly considered while quoting rates.
- d) The successful tenderer who is liable to be registered under CGST/IGST/UTGST/SGST Act shall submit GSTIN along with other details required under CGST/IGST/UTGST/SGST Act to railway immediately after the award of contract, without which no payment shall be released to the contractor. The contractor shall be responsible for deposition of applicable GST to the concerned authority.

e) In case the successful tenderer is not liable to be registered under CGST/IGST/UTGST/SGST Act, the railway shall deduct the applicable GST from his/their bills under reverse charger mechanism (RCM) and deposit the same to the concerned authority.

f) Contractor shall be liable to pay/refund the amount collected as GST to the Indian Railways along with interest and penalties, if any imposed by the authorities, in case GST input tac credit of Indian Railways is denied/rejected by the tax authorities due to reasons mentioned below but not limited to:

Wrong/incorrect invoices issued by Contractor;

No-filing of GST returns;

Non-payment of GST collected from Indian Railways to the authorities; Any other non-compliance done by Contractor;

General Indemnity: Contractor hereby agrees to indemnify and hold harmless the Indian Railways from and against any and all losses, including loss on account of Input Tax Credit and all losses incurred by the Indian Railways relating to or arising out of or in connection with any actual or threatened claim, legal action, proceedings, prosecution or inquiry by or against the Indian Railways arising out, directly or indirectly, of failure by the contractor to comply with the provisions of GST and related laws, or based upon or arising from any failure by the Contractor.

Retention Money: Any payment liable to be paid by Indian Railways to contractor against the goods or services or both supplied by such contractor to Indian Railways shall be kept on hold in case supplier makes any non-compliance of any of the GST law provisions including non-reporting of invoices in GST returns. Such payment shall be released after proper verification of records and availability of ITC to Indian Railways as per provisions of GST Law.

However, if rates of existing GST or cess on GST for Works Contract is increased or any new tax /cess on Works Contract is imposed by Statute after the date of opening of tender but within the original date of completion/date of completion extended under clause 17 & 17A and the Contractor thereupon properly pays such taxes/cess, the Contractor shall be reimbursed the amount so paid.

Further, if rates of existing GST or cess on GST for Works Contract is decreased or any tax/cess on Works Contract is decreased / removed by Statute after the date of opening of tender, the reduction in tax amount shall be recovered from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India.

- g) When work is tendered for by a firm or company, the tender shall be signed by the individual legally authorized to enter into commitments on their behalf.
- h) The Railway will not be bound by any power of attorney granted by the tenderer or by changes in the composition of the firm made subsequent to the execution of the contract. It may, however, recognize such power of

attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Contractor.

The tenderers shall submit a copy of certificate stating that all their statements/documents submitted along with bid are true and factual. Standard format of certificate to be submitted by the bidder is enclosed as Form No.9(in Forms & Annexures part of Chapter - 3). Non submission of above 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 is qualifying the Qualifying Criteria mentioned in the Tender Document.

2.52 TERMS OF PAYMENT:

The Contractor will be entitled to be paid from time to time by way of "On Account payment" for supply of materials and works as in the opinion of the engineer who has executed in terms of the contract.

All bills shall be subject to any deduction or recovery which the Railway may be entitled to make under contract.

The Contractor shall be entitled to be paid from time to time by way of "On Account" payment as per clause 46(i) of General Conditions of Contract. While processing payment of any 'On Account Bill' contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at 'www.shramikkalyan.indianrailways.gov.in' till ____Month, ____Year."

ON ACCOUNT PAYMENT:

Such "On Account Payments" will be made for supply of equipment, materials indicated in the supply schedule on receipt of materials in good condition at the Stores of CDMS/Perambur & SSE/OFC/TPJ.

- A) Works involving Goods and Goods incidental: (Non-SOR item No: 1,2,3,4,5,6,7,8,9,10,18,21,22,23,25,28,29,30,32,34,35,43) & (SOR Item Nos: 6,7)
 - 90% of value of material will be paid on receipt of materials at Railway's Stores i.e., CDMS/Stores/Perambur & SSE/OFC/TPJ depot accompanied by inspection certificate
 - ii. **5% of value of material** will be paid after successful completion and commissioning of the work in each block section.
 - iii. **5% value of material** as per agreement shall be paid in final bill (as per GCC Para.51 (1)).

i)Store receipt certificate issued by consignee.

ii)Original Inspection certificate issued by Inspecting Official viz. RDSO/RITES/Railway Representative or Inspection Waiver Certificate issued be competent authority.

iii)Manufacturer's certificate for the equipment that the materials are in accordance with the specifications of the contract.

iv)Challan/Invoice in duplicate. The payment of supply items should be accepted as per time frame mentioned in SCC.

v)The contractor has to furnish an indemnity bond see **Form No.5** (in Forms & Annexures part of Chapter - 3) before payment is claimed, indemnifying the Railway Administration until completion of the work, against all damages, costs, charges, expenses, loss and liability, which the Railways may sustain, incur or be put to, by reasons or in subsequence directly or indirectly due to the Contractor not fulfilling the portion of the Contract involving the installation, testing and commissioning of the items supplied by the Contractor.

B) Item of works involving works and services incidental: (Non-SOR item No: 11,12,13,14,15,16,17,19,20,24,26,27,31,33,38)

- 70% of the value of material as per agreement shall be paid as on accounts bills on production of certificates.
- ii) **20% of the value of material** as per agreement shall be paid after successful installation, testing and commissioning of the material/equipment's in each station.
- iii) 5% of the value of material as per agreement shall be paid after successful submission of all "As-Made" documents.
- iv) **5% value of material** as per agreement shall be paid in final bill (as per GCC Para.51 (1)).
- C) For work involving only service and Installation, Configuration, Testing & Commissioning Items: (Schedule item NS No: 34,36,37,39,40,41,42,44,45,46,47,48,49) & (SOR item No.1,2,3,4,5)
 - i) **90% of the value of the item** commissioned shall be paid after successful completion of work by the Railway's representative.
 - ii) **5% value of the item** commissioned shall be paid after the commissioning of the system by the Railway's representative.
 - 5% value of the item commissioned shall be paid in the final bill (as per GCC Para.51 (1)).

2.53 FINAL PAYMENT:

- Final payment of 5% (Five Percent) of contract value shall be made after Warranty Period is completed as per Para 2.41 of SCC and as per para 51(1) of GCC.
- ii) The contract for this work will be considered complete after completion of Warranty Period as per Para 2.41 of SCC.
- iii) For releasing of Final Bill, contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at 'www.shramikkalyan.indianrailways.gov.in' till _____Month, ____Year."

 On the basis of (i), (ii) and (iii) above for all the works in all the section covered in this contract, and reconciliation of materials issued, the final bill for the balance payment for each item of work shall be submitted by the Contractor along with a clear 'No Claim Certificate'.

On the Engineer's certificate of completion in respect of the works, adjustment shall be made and the balance of account based on the Engineer or the Engineer's representative's certified measurements or Engineer's certified "contractor's authorized engineer's measurements" of the total quantity of work executed by the Contractor up to the date of completion and on the rates accepted in Bill of quantities and for extra works on rates determined under Clause 39(of GCC 2022)of these Conditions shall be paid to the Contractor subject always to any deduction which may be made under these presents and further subject to the Contractor having signed delivered to the Engineer enclosing either a full account in detail of all claims he may have on the Railway in respect of the works or having delivered No Claim Certificate and the Engineer having after the receipt of such account given a certificate in writing that such claims are not covered under excepted matter i.e. Clauses 7(j), 8, 18, 22(5), 39.1, 39.2, 40A, 43(2), 45(i)(a), 55, 55-A(5), 57, 57A, 61(1), 61(2) and 62(1), 63(iv) and 63.2.11 of Standard General Conditions of Contract or in any Clause of the Special Conditions of the Contract, that the whole of the works to be done under the provisions of the Contracts have been completed, that they have been inspected by him since their completion and found to be in good and substantial order, that all properties, works and things, removed, disturbed or injured in consequence of the works have been properly replaced and made good and all expenses and demands incurred by or made upon the Railway for or in the respect of damage or loss by from or in consequence of the works, have been satisfied agreeably and in conformity with the contract.

Note:

For releasing of Final Bill, contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made to them during the wage period in Railway's Shramikkalyan portal at 'www.shramikkalyan. indianrailways.gov.in' till _____Month, ____Year."

2.54 POST PAYMENT AUDIT:

It is an agreed term of contract that the Railway reserves to itself the right to carry out a post-payment audit and/ or technical examination of the works and the final bill including all supporting vouchers, abstracts etc. and to make a claim on the Contractor for the refund of any excess amount paid to him till the release of security deposit or settlement of claims, whichever is later, if as a result of such examination any over-payment to him is discovered to have been made in respect of any works done or alleged to have been done by him under the contract.

2.55 MODE OF PAYMENT TO CONTRACTOR:

All payments to contractors/suppliers will be made through National Electronic Fund Transfer (NEFT) system. It is mandatory to enclose, MANDATE Form given in (**Annexure-2** of Chapter-3 Forms & Annexure) which will require to be filled in along with the offer. Indian Financial System Code (IFSC) of the concerned bank shall be given in the MANDATE form or through Letter Of Credit (LC) arrangements.

In case Tenderer seeks payment through Letter of Credit then the option can be exercised at the time of bidding only. Special condition for Letter of Credit in works tender vide Railway Board Lr No 2018/CE-I/CT/9 Dt 04.06.2018 are given below:

- (i) For all the tenders having advertised cost of Rs.10 lakhs or above, the contractor shall have the option to take payment from Railways through a letter of credit (LC) arrangement.
- (ii) This option of taking payment through LC arrangement has to be exercised in IREPS (Indian Railway Electronic Procurement System -the eapplication on which tenders are called by Railways) by the tenderer at the time of bidding itself, and the tenderer shall affirm having read over and agreed to the terms and conditions of the LC option.
- (iii) The option so exercised, shall be an integral part of the bidder's offer.
- (iv) The above option of taking payment through LC arrangement, once exercised by tenderer at the time of bidding, shall be final and no change shall be permitted, thereafter, during execution of contract
- (v) In case tenderer opts for payment through LC, following shall be the procedure to deal release of payment through LC
 - (a) The LC shall be a sight LC

- (b) 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
- (c) SBI, New Delhi, Main Branch will be the nodal branch for issue of LCs based on online requests received from Railway Accounts Units for tenders opened in financial year 2018-19. SBI branches where the respective Railway Accounts Office has its Account (local SB1branch) will be the issuance/reimbursing branch for LC issued under this arrangement. The Bank shall remain same for this tender till completion of contract. The incidental cost @0.15% per annum of LC value, towards issue of LC and operation thereof shall be borne by the contractor and shall be recovered from his bills
- (d) The LC shall be opened initially for duration of 180 to 365 days in consultation with contractor. The LC shall be extended time to time as per the progress of the contract, on the request of the contractor. The value of LC to be opened initially as well as extended thereafter shall be finalised by the engineer in consultation with the contractor on the basis of expected progress of work
- (e) The LC terms and conditions shall inter-alia indemnify and save harmless the Railway from and against all losses, claims and demands of every nature and description brought or recovered against the Railways by reason of any act or omission of the contractor, his, agents or employees, in relation to the Letter of Credit (LC). All sums payable/borne by Railways on this account shall be considered as reasonable compensation and paid by contractor
- (f) The LC terms and conditions shall inter-alia provide that Railways will issue a Document of Authorisation (format enclosed as Annexure 2) after passing the bill for completed work, to enable contractor to claim the authorized amount from their bank
- (g) The acceptable, agreed upon document for payments to be released under the LC shall be the Document of Authorisation
- (h) The Document of Authorisation shall be issued by Railway Accounts Office against each bill passed by Railways
- (i) On issuance of Document of Authorisation, a copy of Document of Authorisation shall be posted on IREPS for download by the contractor. A digitally signed copy of Document of Authorisation shall also be sent by Railway Accounts Office to Railway's bank(Local SBI Branch)
- (j) The contractor shall take print out of the Document of Authorisation 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 Authorisation, Bill of Exchange and Bill
- (k) The payment against LC shall be subject to verification from Railway's Bank (Local SBI Branch)
- (I) The contractor's bank (advising bank) shall submit the documents to the Railway's Bank (Local SBI Branch)
- (m) The railway's bank (issuing bank) shall, after verifying the claim so received w.r.t. the digitally signed Document of Authorisation received from Railway Accounts Office, release the payment to contractor's bank (advising bank) for crediting the same to contractor's account

- (n) Any number of bills can be dealt within one I.C, provided the sum total of payments to contractor is within the amount for which LC has been opened
- (o) The LC shall be closed after the release of final payment including PVC amount, if any, to the contractor
- (p) The release of performance guarantee or security deposit shall be dealt directly by railway with the contractor i.e., not through LC

2.56 FINAL SETTLEMENT:

Not applicable

2.57 DEDUCTION FROM ON ACCOUNT BILLS:

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 progressive payment Bills/Invoice of Contractor, as and when it is understood that such expenses has been incurred or paid for. 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.

2.58 DEDUCTION OF TAXES:

Railways will deduct applicable Taxes such as GST as per extant rules and any other cess to be levied by Government of India. Wherever the law makes it statutory for the purchaser to deduct any amount towards Tax on works contract, the same will be deducted and remitted to the concerned authority. The Contractor and all personnel employed by him shall pay such taxes like Income Tax as are payable under statutory laws of India and the Railways will not accept any liability for the same. In terms of provisions of finance act and income tax act enforce deduction of income tax, surcharge & cess at source shall be made from the contractor and the amount so deducted may be credited to the central government. All other statutory deductions, such as GST, etc., at the rates as applicable at the time of payment, shall be made both from on account bills as well as final bills as per rules in force.

Note:

- Income Tax and surcharge, if any, as notified by the Income Tax department will be deducted at source from each bill, unless otherwise authorized by Income Tax Department.
- 2) If rates of existing GST or cess on GST for Works Contract is increased or any new tax /cess on Works Contract is imposed by Statute after the date of opening of tender but within the original date of completion/date of completion extended under clause 17 & 17A and the Contractor thereupon properly pays such taxes/cess, the Contractor shall be reimbursed the amount so paid.
- 3) Further, if rates of existing GST or cess on GST for Works Contract is decreased or any tax/cess on Works Contract is decreased / removed by

Statute after the date of opening of tender, the reduction in tax amount shall be recovered from Contractor's bills/Security Deposit or any other dues of Contractor with the Government of India.

4) Deduction of labour cess of 1% as per extant instruction from Railway board.

2.59 INSURANCE:

2.59.1 INSURANCE FOR PERSONS EMPLOYED BY CONTRACTOR

The contractor shall take out and keep in force a policy or policies of insurance against all liabilities of the Contractor or the Railways at common law or under any statute in respect of accidents to persons who shall be employed by the contractor in or about the site for the purpose of carrying out the works on the site. The Contractor shall also take out and keep in force a policy or policies of Insurance against all recognized risks to their offices and depots. Such insurance shall in all respects be to the approval of the Purchaser and if he so requires in his name.

2.59.2 INSURANCE OF MATERIALS & INSTALLATIONS:

The contractor shall take out and keep in force a policy or policies of Insurance for all materials including Railway 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 work completion certificate is issued. 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 Railways, be made good by the contractor, at the cost of the Purchaser. The Contractor should, however, insure the stores brought to site, against risks in consequence of war and invasion, as required under the Emergency Risk (Goods) Insurance Act in force from time to time.

It may be noted that the beneficiary of the insurance policy should be Railways or the policies should be pledged in favour of Railway. The contractor shall keep the policy/policies current till the installations are provisionally handed over to the Railways. It may also be noted that in the event of contractor's failure to keep the policy current and alive, renewal of the policy will be done by the Railways for which the cost of the premium plus 20% of premium shall be recovered from the contractor. For purpose of enabling the contractor to take the insurance cover in connection with this contract, the Railways' engineer will advise the approximate price of all the Railway's supply materials to the contractor.

2.60 RATES DURING NEGOTIATION:

The tenderer shall not increase his quoted rates in case the Railway Administration negotiates for reduction of rates. Such a negotiation shall not

amount to cancellation or withdrawal of the original offer and the rates originally quoted will be binding on the tenderer.

2.61 VITIATION:

In the event of vitiation occurring due to increase or decrease in quantities, among the first, second and third lowest valid tenderers etc., the vitiation shall be to the contractors account. The total value of the work done shall be calculated at the rate offered by those tenderers and the amount payable shall be limited to the lowest aggregate value as worked out as per para 1.0 of RB letter dated 08.02.2018.

2.62 LABOUR CAMPS:

Applicable as per GCC Clause 59 (1).

2.63 PAYMENT OF WAGES:

Contractor is to abide by the provisions of Payment of Wages act& Minimum Wages act in terms of clause 54 and 55 of Indian Railways General Condition of Contract.In order to ensure the same, an application has been developed and hosted on website www.shramikkalyan.indianrailways.gov.in. Contractor shall register his firm/company etc. and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The Registration/updation of Portal shall be done as under.

- (a) Contractor shall apply for one time registration of his company/firm etc. in the Shramikkalyan portal with requisite details subsequent to issue of letter of Acceptance Engineer shall approve the contractor's registration on the portal within 7 days of receipt of such request.
- (b) Contractor once approved by any Engineer, can create password with loginID (PAN No.) for subsequent use of portal for all LOA's issued in his favour.
- (c) The contractor once registered on the portal shall provide details of his letter of Acceptances (LOA)/Contract Agreements on Shramikkalyan portal within 15 days of issue of any LOA/or approval of concerned engineer. Engineer shall update (if required) and approve the details of LOA filled by contractor within 7 days of receipt of such request.
- (d) After approval of LOA by Engineer, Contractor shall full the salient details of contract labours engaged in the contract and ensure updating of each wage payment to them on Shramikkalyan portal on monthly basis.
- (e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payment made thereof after each wage period.

While processing payment of any "On Account bill" or "Final bill" or release of "Advance " or "Performance Guarantee/Security deposit", contractor shall submit a certificate to the Engineer or Engineer's representatives that "I have uploaded the correct details of contract labours engaged in connection with this contract and payments made

to them during the wage period in Railway's Shramikkalyan portal at www.shramikkalyan.indianrailways.gov.in till ____ Month Year.

2.64 ASSIGNMENT OR SUBLETTING OF CONTRACT:

The Contractor shall not assign or sublet the contract or any part thereof or allow any person to become interested therein in any manner whatsoever without the special permission in writing of the Chief Engineer, save as provided below. Any breach of this condition shall entitle the Railway to rescind the contract under Clause 62 of these Conditions and also render the Contractor liable for payment to the Railway in respect of any loss or damage arising or ensuing from such cancellation; provided always that execution of the details of the work by petty Contractor under the direct and personal supervision of the Contractor or his agent shall not be deemed to be sub-letting under this clause. In case Contractor intends to subcontract part of work, he shall submit a proposal in writing seeking permission of Chief Engineer for the same. While submitting the proposal to railway, Contractor shall ensure the following:

- (a) (i) Total value of work to be assigned to sub-contractor(s) shall not be more than 50% of total contract value.
 - (ii)The subcontractor shall have successfully completed at least one work similar to work proposed for subcontract, in last 5 years, ending date of submission of proposal by Contractor to Railway, costing not less than 35% value of work to be subletted, through a works contract directly given to him by a Govt. Department; or by a 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, registered at least 5 years back from the date of submission of proposal by Contractor to Railway and work experience certificate issued by a person authorised by the Public Listed Company to issue such certificates.

In case contractor submits subcontractor's work experience certificate issued by public listed company, the contractor 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.

- (iii) There is no banning of business with the sub-contractor in force over IR.
- (b) The Contractor shall provide to the Engineer a copy of the agreement to be entered into by Contractor with subcontractor. No subcontractor shall be permitted without a formal agreement between Contractor and subcontractor. This agreement shall clearly define the scope of work to be carried out by subcontractor and the terms of payment in clear & unambiguous manner.

- (c) On receipt of approval from Chief Engineer, Contractor shall enter into a formal agreement legally enforceable in Court of Law with subcontractor and submit a copy of the same to the Engineer.
- (d) The Contractor shall intimate to the Engineer not less than 7 days in advance, the intended date of commencement of subcontractor's work.
- (e) Once having entered into above arrangement, Contractor shall discontinue such arrangement, if he intends to do so at his own or on the instructions of Railway, with prior intimation to Chief Engineer.
- (f) The Contractor shall indemnify railway against any claim of subcontractor.
- (g) The Contractor shall release payment to the Sub-contractor(s) promptly and shall endeavour to resolve all issues amicably and speedily with the Subcontractor(s), so that the execution of work is not affected in any manner whatsoever.
- (h) In addition to issuance of work experience certificate to Contractor, the Engineer, when, based on documents, is satisfied that subcontracted work has been carried out by subcontractor, shall issue work experience certificate to the subcontractor also for the portion of work subcontracted and successfully completed by the sub-contractor.
- (i) The responsibility of successful completion of work by subcontractor shall lie with Contractor. Subcontracting will in no way relieve the Contractor to execute the work as per terms of the Contract.
- (j) Further, in case Engineer is of the view that subcontractor's performance is not satisfactory, he may instruct the Contractor to remove the subcontractor from the work and Contractor has to comply with the above instructions with due promptness. Contractor shall intimate the actual date of discontinuation of subcontract to Engineer. No claim of Contractor whatsoever on this account shall be entertained by the Railway and this shall be deemed as 'excepted matter' (matter not arbitrable).
- (k) The permitted subcontracting of work by the Contractor shall not establish any contractual relationship between the sub-contractor and the Railway and shall not relieve the Contractor of any responsibility under the Contract.

2.65 DETERMINATION OF CONTRACT:

Right of Railway to Determine the Contract will be dealt as per clause 61,62 of GCC 2022

2.66 SETTLEMENT OF DISPUTES:

2.66.1 Matters Finally Determined by the Railways: (Refer GCC Clause 63)

All disputes and differences of any kind whatsoever arising out of or in connection with the contract, whether during the progress of the work or after its completion and whether before or after the determination of the contract, shall be referred by the contractor to the GM and the GM shall, within 120 days after receipt of the contractor's representation, make and notify decisions on all matters referred to by the contractor in writing provided that matters for which provision has been made in Clauses 8, 18, 22(5), 39, 43(2), 45(a), 55, 55-A(5), 57, 57A, 61(1), 61(2) and 62(1) to (xiii)(B) of Standard General conditions of contract or in any clause of the special conditions of contract shall be deemed as 'excepted matters' (matters not arbitrable) and decisions of the Railway authority, thereon shall be final and binding on the contractor; provided further that 'excepted matters' shall stand specifically excluded from the purview of the Arbitration clause.

2.66.2 Dispute Adjudication Board (DAB): This clause is applicable in the tender having advertised value more than Rs 50 Crore. (Refer Clause63.2 of GCC 2022 for complete details).

2.67 FORCE MAJEURE: (Refer GCC Clause 17)

If at any time, during continuance of this Contract, the performance in whole or in part, by either party, of any obligation under this contract shall be prevented or delayed by reason of any war, hostility, act of the public enemy, Civil Commotion, Sabotage, serious loss or damage by Fires, Floods, Earth quakes, explosions, strikes, epidemics, Quarantine restrictions, lockouts, any statute, statutory rules, regulations, order of requisitions issued by any Government Department or Competent Authority or acts of God (here-in-after referred to as events) provided, notice of the happening of any such event is given by either party to the other within 30 days from the date of occurrence thereof neither party shall by reason of such event be entitled to terminate this Contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance, and works under the Contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist, and the decision of Engineer as to whether the works have been so resumed or not shall be final and conclusive. PROVIDED FURTHER that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 120 days, either party may at its option terminate the contract by giving notice to the other party.

2.68 LOCAL CONTENT / PUBLIC PROCUREMENT (Preference to Make in India), Order 2017

- 2.68.1 Letter issued by Department of Industrial Promotion and Policy (DIPP) (now renamed as the Department for Promotion of Industry and Internal Trade (DPIIT)) under the Ministry of Commerce and Industry regarding PPP-MII policy issued vide their order No. P-45021/2/2017-PP (BE- II) dated 16-09-2020, (as amended from time to time) and Notification of DoT issued vide No. 18-10/2017-IP dated 29.08.2018, 31-08-2021 (as amended from time to time) shall be applicable for this tender. The format for self-certification regarding local content by the tenderer and OEM for all Telecom products in the Tender and local content by the tenderer for Overall Tender shall be submitted vide Annexure 4 along with the bid. Non submission of this certificate shall be liable for rejection.
- 2.68.2 In case a complaint is received by the procuring entity or the concerned Ministry/Department against the claim of a bidder regarding Local Content (LC) in a locally supplied telecom product, services or works, the same shall be referred to the Committee as below. The Committee should dispose of the complaint within 4 weeks, as far as possible, from the date of receipt of complaint along with all necessary documentation in support of Local Content claimed by the bidder.

In terms of clause 9(d) of PPP-MII Order, the following Committee is constituted for complaints and independent verification of self-declarations and auditor's/accountant's certificates on random basis:

- i) DDG(TC), TEC, New Delhi -Chairperson Member
- ii) Director (Technical), C-DOT Member
- iii) Any other member(s) as co-opted by the chairperson Member
- iv) DG, TEPC Member
- v) Director (Finance), DoT Member
- vi) Director, TEC Convener

Tenderers, please note that DoT PPP MII order dated 29.08.2018 notifies telecom services/works under item 36 of the Table-A indicating 70% local content requirement. As per clause 3(a) of latest DPIIT PPP-MII order dated 16.09.2020, goods, services or works notified by Department of Telecommunication (DOP) shall be procured from only Class-I local supplier, irrespective of the purchase value.

- Note:- Please enter the percentage of local content in the material being offered. Please enter 0 for fully imported items, and 100 for fully indigenous items. The definition and calculation of local content shall be in accordance with the Make in India policy as incorporated in the tender conditions.
- 2.68.3. Provisions of Make in India Policy 2017 issued by Govt. of India, as amended from time to time, shall be followed for consideration of tenders. In this regard, value of local content of total project in % has to be filled up in Mandatory fields of IREPS Portal. CA certificate giving value of local content of tender has to be submitted along with Bid to comply Make in India Policy requirement. Value filled up on IREPS portal will be treated as minimum value of local content. Normally, CA certificate shall mention same value of local content as filled up in mandatory field, however, certificate giving values in form of range (like more than 50% or 21 %-50%) to qualify as per relevant class will also be accepted. However, in case of difference in values in IREPS field & in

certificate, value given in CA certificate will be final.

2.69 TRAINING

- The tenderer shall undertake to impart training to Railway staff either at site of installation or their factory premises/ at an reputed institution in different aspects of equipment, its architecture, functioning and planning, management supervision ,field installation supervision, commissioning, testing and maintenance both for H/W and S/W areas in order to transfer complete know how so as to impart full knowledge and confidence to independently execute successfully commissioning of System. The training courses should include hands on the equipment, visits to installations apart from formal classes.
- The OEM should train the Railway personnel to such level of proficiency that they may carry out changes in Servers/Gateways/Consoles or other OEM specialized system without the help of OEM.
- The training course to be conducted at the manufacturing facilities shall be designed to train the trainees in all aspects of System engineering, equipment operation, installation and functional details, theory of operation of equipment, trouble shooting and familiarization with the equipment at card and component level.
- All equipment used for training shall be identical to those quoted and supplied for site installation in hardware and software versions.
- Expenses on travel for the Railway Staff will be borne by Railway.
- The subjects of training, details of courses etc. should be furnished on demand of the Railway and it should be ensured that the trainees are given sufficient material for technical reference and guidance as well as for imparting complete know-how.
- The complete documentation on the courses should be supplied to the trainees Railway, however reserves the right to vary the number personnel as well as course modules and training periods so considered necessary.
- CD/DVD/USB storage made with the specific intent of giving training on the theory and maintenance of equipment shall also be supplied by the contractor.
- After the completion of course, all such materials shall become the property of the PURCHASER. The Purchaser/Engineer reserves their right to suggest any additions/deletions in the program, which shall be incorporated by the bidder at no additional cost.

2.70 PENALTY FOR DAMAGING THE CABLES:

As per RB Telecom Circular No.17/2013 containing JPO for undertaking digging work in vicinity of Signaling, Electrical and Telecommunication Cables circulated vide No.2003/Tele/RCIL/1 Pt.IX dt: 24.06.2013 or latest RB guidelines in this regard time to time will be applicable to this tender. Penalty will be imposed for damaging of Railway Signaling, Telecom , Electrical etc. as per JPO or latest circulars.

2.71 POLICE VERIFICATION OF CONTRACT STAFFS:

Police Verification of antecedents of contractual staff will be applicable for this tender vide RB.DO. No.2020/Sec(CCB)/45/50/Misc dt:03.02.2020.

2.72 TRUSTED TELECOM PORTAL (TTP):

As per RB circular No.2023/Tele Dev/Trusted Sources Dt:11.10.2023, the LTE e-Node-B, cell site routers, switches and the IP/MPLS routers that will be used on Indian Railways, should be got cleared through the Trusted Telecom Portal before the supply of equipment is applicable for this tender.

****END OF CHAPTER - 2****

CHAPTER – 3 FORMS & ANNEXURES

FORM No. 1A

TECHNICAL CREDENTIALS

(Only for technical eligibility criteria (completed similar work))

[Refer Para 2.5.1 and 2.5.2 of Tender Document]

For the most eligible contractors who had completed similar works, Tenderers shall have to submit the following details along with tender duly attested by the tenderer. The tenderer shall also enclose relevant certificate/documents issued by the concerned authority in this regard:

aati	dunonty in this regard.					
1.	Name of work.					
2.	Contract awarding Authority.					
3.	Contact agreement No.					
4.	Name of the firm.					
5.	Date of award.					
6.	The original value of the contract.					
7.	The original date of completion.					
8.	(a) Whether work has been physically					
	Completed					
	(b) Actual date of completion.					
9.	The final value of the contract.					
10.	Whether working as a main contractor					
11.	Whether working in an individual capacity					
	or a Joint venture.					
12	Whether working as a Sub - Contractor					
13.	If the work was executed as a joint					
	venture firm, the share of each partner to					
	be given.					
14.	The brief scope of work.					
15.	Reference with Page No. in the submitted					
	document.					
		1				

Signature by officer JAG/ above Signature & Date

Seal

FORM No. 1B

TECHNICAL CREDENTIALS

{Only for Technical Eligibility Criteria (for substantially completed similar work)} [Refer Para 2.5.1 and 2.5.2 of Tender Document]

For the most eligible contractors who had completed similar works, Tenderers shall have to submit the following details along with tender duly attested by the tenderer. The tenderer shall also enclose relevant certificate/documents issued by the concerned authority in this regard:

1.	Name of work.	
2.	Contract awarding Authority.	
3.	Contact agreement No.	
4.	Name of the firm.	
5.	Date of award.	
6.	The original value of the contract.	
7.	The original date of completion.	
8.	(a) Whether work has been Substantially completed	
9.	The present value of the contract (Excluding PVC if any)	
10.	Whether working as a main contractor	
11.	Whether working in an individual capacity or a Joint venture.	
12	Whether working as a Sub - Contractor	
13.	If the work was executed as a joint venture firm, the share	
	of each partner to be given.	
14.	The brief scope of work.	
15.	Reference with Page No. in the submitted document	

It is certified that there is NO proceedings of termination of contract on Contractor's default has been initiated

Signature by officer JAG/ above Signature & Date Seal

FINANCIAL CREDENTIALS [Refer Para 2.5.3 of Tender Document]

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	INR Equivalent		
Average					

- 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 BIDD

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)

STATEMENT OF DEVIATIONS PROFORMA FOR STATEMENT OF DEVIATIONS

The following are the particulars of deviations from tender document:

Chapter No. XXX

SL	CLAUSE	DEVIATION	REMARKS		
No.	CLAUSE	DEVIATION	(INCLUDING JUSTIFICATION)		

Note: Tenderers are advised to submit the deviations from entire tender document including Annexures. Where there is no deviation, the statement should be uploaded duly signed with an endorsement indicating no deviations. In case, the deviations are not submitted by tenderer, then it will be treated as NIL deviations to the entire tender document.

GUARANTEE BOND TOWARDS PERFORMANCE OF CONTRACTOR

	The President of India, Acting Through the FA&CAO/CN/MS, Southern Railway, Chennai-08,
	Ref: Letter of Acceptance No of Dy. CSTE/Project/MS, Southern Railway, Chetpet, Chennai -31 issued to (Name of the contractor) for " (Name of Work). "
1.	In consideration of the President of India acting through the FA&CAO, Construction, Southern Railway, Chennai, Egmore-600008(hereinafter called "the Government") having agreed to exempt Shri (Hereinafter called "the contractor"), from the demand under the terms and conditions of the agreement under execution between the president of India acting through the FA & CAO Construction, Southern Railway, Egmore, Chennai – 600008 and ("the said contractor") in terms of Letter of Acceptance No dt: "(Name of Work)" by the said contractor of terms and conditions contained in the said Agreement is on the production of Bank Guarantee for Rs (Rupees). as security towards the satisfactory performance of the work from the said contractor for compliance of his obligations in accordance with the terms and conditions in the said agreement.
2.	We (Indicate the name of Bank) a, body corporate constituted under the Banking Companies (Acquisition and Transfer of undertaking) Act, 1970 having its corporate office at hereinafter referred to as "the bank" do hereby undertake to pay to the Government an amount not exceeding Rs (Rupees) against any loss or damage caused to or suffered by or would be caused or suffered by the Government by reasons of any breach by the said contractor/s of any of the terms or conditions contained in the said agreement towards performance of the contract assigned.
3.	We(indicate the name of 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 required to meet the recoveries due or likely to be due from the said contractor. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs (Rupees)

E-Tender Notice No: Proj1MS_VOIP-TCCS_24_RT01 Dated: 07.10.2024

4.	We (Indicate the name of the bank) further undertake to pay the Government any money so demanded not withstanding any dispute or disputes raised by the said Contractor / Supplier in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be valid discharge of our liabilities for payment there under and the said contractor / supplier shall have no claim against us for making such payment.
5.	We (indicate the name of the bank) 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 Deputy Chief Signal and Telecommunication Engineer/Project/I/MS, Chennai-600031 , ministry of railway certified that the terms and conditions of the said Agreement have been fully and properly carried out by the said contractor and accordingly discharge this guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before the expiry of we shall be discharged from all liability under this guarantee thereafter.
6.	In the event of the period of the contract being extended and the contractor fails to extend the validity of this Guarantee for a further period to cover the extended period of the contract before the validity date of this Guarantee, a mere demand or claim made on the bank by the Government on or before the date of discharge of this Bond to the effect that the Contractor has failed to extend the validity of this Bond can be conclusive as regards the amount due and payable by the bank under this Guarantee unless the contractor extend the validity and the bank shall pay the amount forthwith to the Government.
7.	We (indicate the name of the bank) further agree with the Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of terms and conditions of the said agreement or to extend the time of performance by the said contractor(s)from time to time or to postpone from any time to time any of the powers exercisable by the Government against the said contractor 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 is granted to the said contractor or forbearance act or omissions 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 under the law relating to sureties would, but for this provision, have the effect of so relieving us.

8. This Guarantee will not be discharged due to the change in the constitution of the bank

or of the said Contractor.

E-Tender Notice No: Proj1MS_VOIP-TCCS_24_RT01 Dated: 07.10.2024

	(Indicate the i			to revoke this
com	Guarantee shall be valid up pletion period, including the ma Government.		-	
Notwi	ithstanding anything contained h	erein,		
1.	Our liability under this Guarar	ntee shall not exce	ed Rs	(Rupees.
2.	This Guarantee shall be valid u	ıp to	_	
3.	We are liable to pay the guarantee only if you serve up or before, bein Guarantee Bond. Our liability beyond the validity period, and Guarantee.	oon us and we rece ng the expiry of the under this bank gua	ive a written claim e validity period o arantee shall be fu	or demand on r performance ılly discharged
	In witness whereof the,	. (Indicate	the name of Banl	k) hereby affix
	and and seal on this the			,
				name of Bank)
	WITNESSES:			
	Witness No.1 NAME: ADDRESS: PHONE: SIGNATURE:	NAI ADI PHO	ness No.2 ME: DRESS: ONE: GNATURE:	

PROFORMA FOR INDEMNITY BOND

I/We M/s (hereinafter
called the Contractor) which expression includes his successors and assignees in
favour of the president of India acting through the Deputy Chief Signal &
Telecommunication/Engineer/Project-I/Egmore, Southern Railway, 1st Floor,
GC Building, Mc Nichols Road, Chetpet, Chennai-600031 (herein after called the
Railway")
Whereas the parties hereto have entered into an agreement vide letter of
Acceptance No datedfor the purpose of executing
the said contract until such time the materials hereinafter mentioned are duly
erected or otherwise handed over to the Railway.
Whereas I/We (name of the contractors)am/are required to hold in
custody for and on behalf of the railway in trust all-important and indigenous
signalling material which have been handed over to me for installation of
(name of the work)the vide Letter of
Acceptance(LOA No and Date) for the purpose of executing the
said contract until such time the materials are duly erected and are handed over to
Railways. Whereas I/we M/s(name of the contractors) are required
to furnish an Indemnity Bond.

Now by this indemnity bond, we hereby undertake that we hold in my custody for and on behalf of the president of India and his property in trust of the said imported and indigenous signalling materials handed over to us for the purpose of execution of the said contract until such time the materials duly erected or otherwise handed over to the Railways.

We shall be entirely responsible for the safe custody and protection of the said important and indigenous signalling materials against all risk till they are duly erected or otherwise delivered to **Deputy Chief Signal & Telecommunication/Engineer/Project/Egmore, Southern Railway, 1**st **Floor, GC Building, Mc Nichols Road, Chetpet, Chennai-600031** to any other officer as he may direct otherwise and shall indemnify the Railway against any loss, damage or deterioration in respect of the said materials which are in possession.

The said material shall at all times be open for Inspection by any authorized Officer of the Railways.

Should any loss, damage, or deterioration occur or refund becomes due, the President of India shall be entitled to recover from us the compensation for such loss or damage or deterioration the amount is to be refunded without prejudice to any other remedies available to Railways and also by deduction from any sum due

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or any sum which at any time hereinafter may become due to us for this work under other Contract with any other department of the Railways. The value of the above materials for the purpose of Indemnity that can be claimed this indemnity Bond shall not exceed Rs _____ (Rupees _____) In the event of any loss or damage or deterioration as aforesaid, the assessment of such loss or damages or deterioration and the assessment of the compensation thereof would be made by the President of India or his authorized nominee, and the said assessment shall be final and binding upon us. In witness where off we partner of______ (name of the contractor) have executed this indemnity bond on the date, month and year first written at _____ dated this _____ Signed this at day of on WITNESSES: Witness No.2 Witness No.1 NAME: NAME: ADDRESS: ADDRESS: PHONE: PHONE: SIGNATURE: SIGNATURE:

RECEIPT CERTIFICATE (FOR SUPPLY ONLY)

From: Sr. Section Engineer (Signal/Telecom/ ----- Division

No. Date:

- 1. Contract No.
- 2. Name of Work.
- 3. Item No. as in Schedule of work.
- 4. Description of Item.
- 5. Material Inspected by:
- 6. Dispatch particular & date.
- 7. Qty as per dispatch particular
- 8. Qty received.
- 9. Qty short received.
- 10. Condition on Stores Received.
- 11. Name of Firm & Address.
- 12. Place of receipt.
- 13. Date of receipt
- 14. Ledger No.
- 15. Name & designation of Stores In- charge

Signature of Stores -in - Charge

REQUISITION-CUM-RECEIPT FOR THE MATERIAL

Requisition Serial No:	Date:

To: CDMS/S&T/PROJ/PER OR SSE/OFC/TPJ

Please issue the materials for the execution of the ongoing work.

Name of the work

Name of the Contractor:

Site Supervisor: SSE in-charge:

S.N	Description of	Unit	Scheduled	Qty so far	Qty Now	Qty now
0	material		/planned Qty	collected	required	collected

Contractor /Authorized Representative	SSE/PROJ/	Dy.CSTE/XSTE/AXSTE/P/MS
Qty issued as per requisition slip vid Dated:	e challan No	

CDMS/S&T/PROJ/PER or SSE/OFC/TPJ

Form No.8

i. <u>List of works completed</u>

Descriptio n of work	Organiz ation for whom execute d	Approx. value of contract at the time of award (Rs.)	Date of award	Date of scheduled completio n of work	Date of actual completion	Final value of contract (Rs.)

ii. <u>List of works in Hand</u>

Description of work	Contract Value	Approx. value of balance work yet to be done	Date of award

Form No.9

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

I(Na attorney/authorized signatory of the tender		• ,			as	the
M/s		(hereinaft	ter d	called the te	nde	rer)
for the purpose of the tender documents fo	the worl	k of "Provision	of \	VOIP based	l Tra	in
Control Communication System Over South	ern Rail	way " as per th	ne E	-Tender No	tice I	No:
Proj1MS_VOIP-TCCS_24_RT01 Dated: 07.10	2024 of S	outhern Railwa	ay, c	do hereby s	olen	nnly
affirm and state on behalf of the tenderer in	cluding if	s 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 tender conditions and have signed all the pages in confirmation thereof.
- 3. I/We hereby declare that I/We have downloaded the tender documents from the Indian Railway Website www.ireps.gov.in. I/We have verified the document's content from the website, and there is no addition, no deletion, or alteration to the content of the tender document. However, 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 the same shall be binding upon me/us.
- 6. I/We hereby declare that the information and documents submitted along with the tender by me/us are correct, and I/We are fully responsible for the correctness of the information and documents submitted by us.
- 7. I/we certify that I/we the tenderer(s) is/are not blacklisted or debarred by Railways or any other Ministry / Department of Govt. of India from participation in tender on the date of submission of bids, either in individual capacity or as a HUF/ member of the partnership firm/LLP/JV/Society/Trust.
- 8. I/We understand that if the contents of the certificate submitted by us are found to be forged/false or incorrect at any time during the process for evaluation of tenders, it shall lead to forfeiture of the tender EMD/Bid Security and may also lead to any other action provided in the contract including banning of business for a period upto two years. Further, I/We (insert name of the tenderer) **______ and all my/our constituents understand that my/our offer shall be summarily rejected.

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9. I/We also understand that if the contents of the certificate submitted by us are found to the 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 EMD/Bid Security/Security Deposit and Performance Guarantee and may also lead to any other action provided in the contract including banning of business for two years.

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 S	SIGN	ATU	RE
OF	THE	TFN	DFR	FR

Place:
Dated:

** The contents in Italics are only for guidance purposes. Details as appropriate are to be filled in suitably by the tenderer.

This certificate is to be given by each member of JV or partners of partnership firm/LLP/etc.

Form 9(A)
E. New Annexure-V(A), Part of GCC shall be read as under
(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/authorised signatory of the(constituent firm/constituent partner) and member/partner of the(tendering firm) hereby solemnly affirm and state as under.
 I/We certify that
 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/We are not from such a country or, if from such a country, have been registered with the competent Authority. I/We herby 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:

Form No.10

SOUTHERN RAILWAY TENDER FORM (FIRST SHEET)

E-Tender Notice No: Proj1MS_VOIP-TCCS_24_RT01 Dated: 07.10.2024

Name of the work: Provision of VOIP based Train Control Communication System Over Southern Railway

To
The President of India,
Acting through the Dy.CSTE/Projects-I/MS,
Southern Railway, Chennai.

I/We	have ı	read the	various	conditions	to te	ender
attached hereto and agree	to abide by the	said condit	tions. I/W	le also agr	ee to	keep
this offer open for acceptar	ice for a period of	of 90 days	from the	date fixed	for cl	osing
of the tender and in defau	It thereof, I/We v	will be liab	le for for	feiture of m	าy/our	· "Bid
Security". I/We offer to do	the work for Sou	uthern Rail	way, at th	ne rates que	oted i	n the
attached bill(s) of quantities	and hereby bind	d myself/ou	rselves to	complete t	he wo	ork in
all respects within 12 mor	nths from the da	ate of issue	e of letter	of accepta	nce c	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 Rs.12,28,700 /- 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 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 the receipt of orders to that effect.

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4.	(a) I/We am/are a Startup firm registered Industrial Policy and Promotion (DIPP) and my valid upto (Copy enclosed) and Bid Security.	registration number is
5.	•	_
	to deposit only 50% of Bid Security.	
6.	Until a formal agreement is prepared and shall constitute a binding contract between us mutually agreed to between us and indicated in offer for this work.	subject to modifications, as may be
		Signature of Tenderer(s)
		Date
		Address of the Tenderer(s)

Form No.11

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 Chief Signal and Telecommunication Engineer/Projects or obtained from the office of the Chief Signal and Telecommunication Engineer/Projects, Southern Railway on payment of prescribed charges.
 - (e) Standard Schedule of Rates (SSOR) as amended / corrected up to latest correction slips, copies of which can be seen in the office of Chief Signal and Telecommunication Engineer/Projects or obtained from the office of the Chief Signal and Telecommunication Engineer/Projects, Southern 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 Chief Signal and Telecommunication Engineer, Southern 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 single percentage for schedule A and individual rate for each item for schedule B in IREPS. 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 12 (Twelve) months from the date of issue of acceptance letter.

6. EMD/Bid Security:

- (a) Subject to exemptions provided under para 5(1) (a) of Part-1 (ITT) of GCC 2022. The tender must be accompanied by a sum of Rs. 12,28,700.00/- (Twelve Lakhs Twenty-Eight Thousand Seven Hundred Rupees only) as EMD/Bid Security deposited in cash through e-payment gateway/as Bank Guarantee bond, failing which the tender shall be summarily rejected.
- (b) The Tenderer(s) shall keep the offer open for a minimum period of 90 days 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 resile from his offer or modify the terms and conditions thereof in a manner not acceptable to the Chief Signal and Telecommunication Engineer/Projects of Southern Railway. Should the tenderer fail to observe or comply with the foregoing stipulation, the amount deposited as or Bank guarantee bond submitted as EMD/Bid Security for the due performance of the above stipulation, shall be forfeited to the Railway.
- (c) If his tender is accepted,
 - (i) the EMD/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 fulfilment of the contract in terms of Clause 16 of the Standard General Conditions of Contract.
 - (ii) The EMD/Bid Security mentioned in sub para(a) above submitted as Bank guarantee bond, will be encashed as part security for the due and faithful fulfilment of the contract in terms of Clause 16 of the Standard General Conditions of Contract.

The EMD/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 EMD/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 EMD/Bid Security, the Railway shall return the EMD/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. In case if tender is accepted in part by Railway administration, Letter of Acceptance shall be issued as counter offer to the Tenderer, which shall be subject to acceptance by the Tenderer.

- **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 of the following during last 07 (seven) years, ending last day of month previous to the one in which tender is invited:

One similar work each costing not less than the amount equal to 60% of advertised value of the tender.

(OR)

Two similar works each costing not less than the amount equal to 40% of advertised value of the tender,

(OR)

Three similar works each costing not less than the amount equal to 30% of advertised value of the tender,

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

person authorized by the Public listed company to issue such certificates.

also be considered provided the work experience certificate has been issued by a

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 **Form No.2**, 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 -6.

- **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:

- a) 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.
- **b)** 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.
- c) 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
- d) 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.

- e) 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 fulfilment of credentials.
- f) In case a work is considered similar in nature for fulfilment 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.
- g) 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.

- h) 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) 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.
- j) 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.
- k) 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) 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.
- **m)** 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.
- **n)** In case a tenderer is LLP, the credentials of tenderer shall be worked out on above lines similar to a partnership firm.
- **o)** 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.

- (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 Form 9A. In addition to Form 9, in case of other than company/Proprietary firm Form 9(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 EMD/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. EMD/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 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 ______, _____ 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**:

- 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 suomoto 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 / 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 Appostille 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 EMD/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 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.
- **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 EMD/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 along with 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 EMD/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 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 Appostille 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 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 10% of advertised value of the tender.

(b) For works with composite components

The technical eligibility for <u>major component</u> 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 <u>other component(s)</u> 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 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 10% of cost of any component of work mentioned in technical eligibility criteria.

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 of form no 11. 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 EMD/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 EMD/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 EMD/Bid Security shall be submitted by partnership firm. The EMD/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 fulfilment of the eligibility criteria laid down in Para 10 of the Tender Form (Second Sheet) above.

	(Signature)
	(Designation)
Signature of Tenderer(s)	Railway
Date	

FORM No. 12

<u>Declaration of Proprietary Firm or Partnership Firm or Company or Joint Venture</u> (JV) or Registered Society or Registered Trust or Hindu Undivided Family (HUF) or <u>Limited Liability Partnership (LLP) etc.</u>

I/we hereby solemnly declare that I/We** is/are participating as a Proprietary Firm or Partnership Firm or Company or Joint Venture (JV) or Registered Society or Registered Trust or Hindu Undivided Family (HUF) or Limited Liability Partnership (LLP) for the E-Tender Notice No: Proj1MS_VOIP-TCCS_24_RT01 Dated: 07.10.2024

Signature of Tenderer

With Seal

** - Name of the Tenderer/Bidder

Note: Tenderer/Bidder shall clearly specify whether he/they are participating as a Proprietary Firm or Partnership Firm or Company or Joint Venture (JV) or Registered Society or Registered Trust or Hindu Undivided Family (HUF) or Limited Liability Partnership (LLP) in the above

Form No.13

VENDOR MANDATE FORM

E-Tender Notice No: Proj1MS_VOIP-TCCS_24_RT01 Dated: 07.10.2024

PARTICULARS OF THE TENDERER:
(a) Name
(b) ADDRESS:
(i) Holding No. / Premises: (ii) Room No. : (iii) Street Name : (iv) City/Village/Town (v) District : (vi) State : (vi) PIN :
(c) Phone No
(d) PAN No
GST Registration No

Signature of Tenderer

Annexure-1

INSTRUCTIONS FOR SUBMITTING THE TENDERS AS JOINT VENTURE

On Non-judicial stamp of Rs. 100/- MEMORANDUM OF UNDERSTANDING FOR JOINT VENTURE AGREEMENT
This memorandum of understanding executed this day of
20 between (Name of Co.) a company registered under the Companies Act1956 having its registered office at represented through its Director/Authorized
Representative (hereinafter referred to as
which expression shall unless repugnant to the context thereof includes it successors) of the FIRST PART.
AND /OR
M/s a partnership firm constituted under the Indian
Partnership ACT1932, having its registered office at, represented
through its partner Shri /Authorized Representative Shri
which expression
shall unless repugnant to the context thereof includes its successors) of the FIRST
PART.
AND/OR
M/sa proprietary concern having its registered office at
Represented through its sole proprietor Shri
(hereinafter referred to as which expression shall unless
repugnant to the context thereof includes it successors) of the FIRST PART.
Whereas, the party of the First part i.e. M/s
details to be supplied of the expertise in their field. Whereas, the party of the
Second part M/s details to be supplied of the expertise in their field. Whereas, the party of the third part
M/s details to be supplied of the expertise in
their field.
AND whereas parties to this MOU have agreed to co-operate with each other to
associate jointly and to form a Joint Venture to participate in the Southern Railway
Tender. Now, therefore, in consideration of the promises and mutual promises and
of the undertaking contained herein, it is hereby agreed between the parties of the
MOU as follows:
The purpose of MOU:
M/o
M/s, and
agree to Co-operate with each other for the purpose of joint

1.

E-Tender Notice No: Proj1MS_VOIP-TCCS_24_RT01 Dated: 07.10.2024

_	
	participation in the Southern Railway Tender and in the event, the contracts awarded, to jointly execute the contract. The broad interfaces and scope of work of each party is set forth below:
2.	The name of the Joint Venture shall be
3.	The parties, hereto, represent that:
a)	They are in possession of all approvals and valid authorization for the purpose of execution of this MOU.
	They have not entered into any agreement/MOU of equal or similar nature with any third-party for this E-Tender Notice No: Proj1MS_VOIP-TCCS_24_RT01 Dated: 07.10.2024
b)	That each of the parties of JV, agrees and undertake to place at the disposal of the JV, benefits of its individual experience, technical knowledge and skill and shall in all respects bear its share of the responsibility, including the provision of information advice and other assistance required in connection with the works. The share and the participation of the partners in the JV shall broadly be follows:
	M/s%
	M/s%
	M/s%
	"That M/s shall be the lead member of JV firm who shall have a majority (at least 51%) share of interest in the JV firm. The other members shall have a share of not less than 20% each (in case of firm with upto three member) The other members shall have a share of not less than 10% each (in case of JV firm with more than three members). In case of JV firm with foreign member(s), the lead member has to be an Indian firm with a minimum share of 51% (strike out which is not applicable) And all right, interest, liabilities, obligations, work experience and risks (net profits or net losses) arising out of the contract shall be shared or borne by the Parties in proportionate to these shares. Each of the parties shall bound by guarantees, sureties required for the work as well as its proportionate share in working capital another financial requirements.
3.	The parties to this MOU undertake:

the

of

tender,

modified/altered/terminated during the validity of the tender including extension and maintenance period except when modification becomes inevitable due to

MOU

shall

the

submission

after

succession laws etc., but in no case the minimum eligibility criteria would be vitiated.

- b) That after the contract is awarded the constitution of the JV Firm shall not be altered during the currency of contract except when modification becomes inevitable due to Succession Law etc., "but in no case the minimum eligibility criteria would be vitiated".
- c) That with respect of the Southern Railway Tender neither party, nor any subsidiary company of either Party, not any joint venture company or any other entity, in which the party/parties, is or are in any way interest, shall complete together with or through any third party, nor shall be parties advise, consult for, engage in or otherwise assist in any way person or entity or any affiliate thereof in respect of any orders or contracts related to this tender.
- d) That none of the members of joint ventures is black listed and/or debarred by the Railway Board or and other ministry or department of Govt. of India/State Govt. from participation in contract/under in the past either in individual capacity or the JV Firm or partnership firm in which they were/are members/partners.

4. Joint & Several Liability:

In respect of the Southern Railway Tender, all commercial terms shall comply each part on back-to-basis specifications of the Railway Board Tender or any other mutually agreed terms with the Owner/Customer. The Parties hereto shall, if awarded the contract for the project for which the Joint Venture is formed, be jointly and severally liable to the Railway for execution of the project in accordance with the contract. The Parties hereto also undertake to be liable jointly and severally for the loss, damages caused to the Railway in course of execution or due to non execution of the contract or part thereof arising out of the contract.

- 6. Shri______ be authorized partner/person on behalf of the Joint Venture to deal with tender, to 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 Southern Railway tender/Contract. All notices /correspondence with respect to the contracts would be sent only to this authorized partner/person of the JV firm.
- 7. Notwithstanding anything herein, in respect of the Railway Tender, with regard to the internal relationship, the inter se liabilities between the parties shall be in proportion to their respective scope of work and shall be subject to the provisions of this MOU.

8. Responsibility:

Each Party shall assume and accept full responsibility for its Scope of Work and the obligations imposed in the Contract and in this MOU as if it was, with regard to this Scope of Work, an independent partner contracting individually with the Customer. In the event of any defect and damage or any claim arising from the Customer under the Contract or any third party in relation to or as a consequence of any failure to meet the performance specification the Party, within whose Scope of Work the claim arises, shall be entirely responsible for the claim and shall indemnify and hold harmless the other Party from any liability, demand, claim burden cost, expense attorney's fees and costs arising from thereof.

9. Assign ability:

No party to the Joint Venture has right to assign or transfer the interest, right or liability in the contract without the written consent of the other party and that of the Indian Railway.

10. Use of Machinery, Instruments, Labour Force etc:

The Parties hereto undertake that whatever the machinery, instruments, Labour force (including unskilled, skilled, inspectors, Engineers etc.) they possess at the time of entering into Joint Venture Agreement or which subsequently shall come in their possession and if such machinery, instruments, labour force is required for the speedy and efficient execution of the work, the Party/Parties having the control over the said machinery, instrument, labour force etc. Without having any regard to their share of profit and loss agreed to between the Parties in Joint Venture Agreement shall hand over the same at the disposal of the other party who is actually executing the work for the purpose of execution of the contract without any hindrances and obstacle.

11. Duration of MOU:

It shall be valid during entire currency of contract including the period of extension, if any and also till the maintenance period is over or till all the contractual liabilities including warranty /guarantee obligations are discharge completely.

a) Applicable Law:

The MOU and any arrangement/agreements regarding the performance shall be construed and interpreted in accordance with and governed by the Laws of India and shall be subject to the exclusive jurisdiction of the courts at the place where MOU is executed/signed between the parties.

b) Settlement of Disputes:

In the event of disputes arising from the MOU, the Parties to the MOU undertakes to endeavour to settle the said disputes amongst them amicably. However, if the parties fail to resolve the disputes amongst them amicably, the said disputes arising out of or in connection with the present MOU shall be resolved through Arbitration as per the provisions enshrined under the Arbitration and Conciliation Act, 1996 or /and statutory modifications made thereafter.

14.	All communications or no and be delivered, maile	•			
	below:-	.,			
	M/s				M/
	S				
	correspondence and noti Lead Member i.e. M/s				
	address M/s	stated	here	ein	below:-
	Such communication or n delivered or, if mailed, wh			ve been duly giver	when so
15.	Each Part shall have full the payment of any taxes nature whatsoever (include employees or personnel including penalties and in this MOU. In witness whereof, the respective authorized repositions are presented in the properties of the properties	s, duties, special insuding personal income to or any of its subconterest, if any, levied Parties have caused	taxes leventractor' in conn	ees or assessmer vied or imposed or semployees or pection with the executed	nts of any any of its personnel) ecution of d by their
	Signature: - Shri of	Signature: - Shri		Signature: - Shri	
	M/s 1) Witness Name:	M/s		M/s1) Witness Name	
	2) Address:	 Witness Name: Address: 		2) Address:	·•
	,	, = =		,	

PROFORMA FOR NEFT MANDATE FORM

FROM: Date:

To,

FA&CAO/ CN/MS, Southern Railway, Chennai-08.

Sub:- Willingness to Receive Payment through RBI's NEFT System.

We refer to the National Electronic Fund Transfer (NEFT) System being set up by Southern Railway, Chennai-03 for remittance of our payments using RBI's NEFT scheme and confirm that we are agreeable to our payments being made through the above scheme to our under noted Account:

NAME OF ORGANISATION AND ADDRESS

MICR CODE OF BANK

IFS CODE OF BANK

BANK NAME

BRANCH NAME

BANK ADDRESS

BRANCH TELE/FAX NO.

BANK ACCOUNT NO.

A Xerox copy of the cheque leaf is attached herewith for necessary action at your end.

Encl : As stated above

TYPE OF ACCOUNT

Signature & Stamp Confirmed by Bank

Annexure-2

Annexure – 3

Make and Model Certificate

The bidder has to mandatorily submit the Make and Model of items being offered against below schedule of work. The make and model shall be clearly written in the list of make and model. Superficial words such as approved make/better make shall not be written. For NS 01 to 10 as listed below must be submitted.

NS No as per NIT	Description of Item	Make Offered	Model Offered
Schedule B	(Non SOR Items)		
NS 01	Supply of Communication and Voice Recording Server as per Clause 5.1 of spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest. Server block shall be provided with 1+1 or 1:1 Redundancy.		
NS 02	Supply of Network Management Server as per Clause 5.2 of spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest		
NS 03	Supply of Portable Maintenance Terminal as per clause no 5.4 of spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest		
NS 04	Supply of Event Notification Gateway as per clause 9.2 of spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest		
NS 05	Supply of Desktop Client PC As per clause 5.3 of spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest.		
NS 06	Supply of Controller Console (Shall be integrated as single unit) as per clause 6.0 of spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest		
NS 07	Supply of Test Room Console (Shall be integrated as single unit) as per clause 7.0 of spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest		
NS 08	Supply of Gateway for Emergency communication at HQ/way station as per clause 10.1 of spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest.		

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NS No as	Description of Item	Make Offered	Model
per NIT			Offered
NS 09	Supply of Control IP telephones without hands free and gooseneck operation for way side station as per clause 8 of spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest		
NS 10	Supply of Mobile Application for event notification gateway as per clause no. 5.2.2.7 & 9.2.4 of spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest		

Annexure 4

Format for Self Certification regarding Local Content (LC) for Gateways (NS 04,08), IP phones (NS 09), L2 & L3 switches (NS 13, 14 &15), Optical fiber cable (NS 32) & Telecom Batteries and local content by the tenderer for the overall tender.

Date:	uns cerun	cate by th	s bludel/telldelt	er will be liable to	i rejection)	
	S/o,	D/o,	W/o	eby solemnly affir	Resident	of
under:			do note	by dolerning ann	m and declare	ao
That I agree to abide Government of India is	•			•		ons,

That the information furnished hereinafter is correct to best of my knowledge and belief and I undertake to produce relevant records before the procuring entity or any other authority so nominated by the Department of Telecommunications, Government of India for the purpose of assessing the LC.

That the LC for all inputs which constitute the said Telecom Product/Services/Works has been verified by me and I am responsible for the correctness of the claims made therein.

That in the event of the LC of the Telecom Product/Services/Works mentioned herein is found to be incorrect and not meeting the prescribed LC norms, based on the assessment of an authority so nominated by the Department of Telecommunications, Government of India and I will be liable as under clause 9 (f) of **Public Procurement (Preference to Make in India) Order 2017.**

I agree to maintain all information regarding my claim for LC in the Company's record for a period of 2 years and shall make this available for verification to any statutory authorities.

- i) Name and details of the Local supplier (Registered Office, Manufacturing unit location, nature of legal entity)
- ii) Date on which this certificate is issued
- iii) Telecom Product/Services/Works for which the certificate is produced
- iv) Procuring agency to whom the certificate is furnished
- v) Percentage of LC claimed
- vi) Name and contact details of the unit of the manufacturer
- vii) Sale Price of the product
- viii) Ex-Factory Price of the product
- ix) Freight, insurance and handling
- x) Total Bill of Material
- xi) List and total cost value of inputs used for manufacture of the Telecom Product/Services/Works

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- xii) List and total cost of inputs which are locally sourced. Please attach LC certificates from local suppliers, if the input is not in-house.
- xiii) List and cost of inputs which are imported, directly or indirectly

Authorized signatory (To be duly authorized by the Board of Directors)

< Insert Name, Designation ,contact no and date>

Annexure 5

(EMD/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,
Railway,
Beneficiary: Railway
Date:
Bank Guarantee Bond No.: Date:
In consideration of the President of India acting through (Designation & address of Contract Signing Authority),
Value of EMD/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 EMD/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

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

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 EMD/Bid Security] as above stated.

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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 EMD/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	
IFSC TYPE	
BANK NAME	
BRANCH NAME	
CITY NAME	
ADDRESS	
DISTRICT	
STATE	
BG ENABLED	

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.

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Date		
Place		Bank's Seal and authorized
	signature(s)	
	[Na	ame in Block letters]
	[Designa	ation 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.

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ANNEXURE-6

TENDERER'S CREDENTIALS (BID CAPACITY)

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 = $[A \times N \times 2] - 0.33xNxB$ 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 up to the date of inviting of tender.

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 up to 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-7

CHECKLIST TO THE TENDER

<u>Name of work:</u> Provision of VOIP based Train Control Communication System Over Southern Railway

CHECK LIST OF ITEMS TO BE COMPLIED BY THE TENDERERS

SL .N	Description of Item	Clause	Compliance	Remarks
1	Have you submitted your bid online on IREPS keeping in mind that your Technical Bid documents will be evaluated independent of your Financial Bid and only if your offer is found technically eligible financial components of your offer will be considered?	2.10	Yes/No	
2	Have you submitted Offer letter complete along with Original/Downloaded Tender document including tender forms (First Sheet & Second Sheet) duly signed with your digital signature?	2.10(I)	Yes/No	
3	Have you submitted requisite EMD/Bid Security online or uploaded scanned bank guarantee bond?	2.10 (III)	Yes/No	
4	Have you uploaded the credential to establish the eligibility? The documents required for ascertaining Technical & Financial capability as Specified in Qualifying Criteria i.e. Para 2.5 of Instructions to Tenderer shall also be enclosed in the offer. Tenderer should also submit Form 1 & Form 2 along with required Annexures.	2.10 (IV), (V) & (VI)	Yes/No	
5	Have you enclosed from 9 and 9A as per the eligibility	Form 9& 9A	Yes/No	
6	Have you enclosed Annexure — 6 (Bid Capacity) along with the Bid	2.10 (VI) Annexure 6	Yes/No	
7	Have you furnished the details of year-wise contractual payment received during the last three financial years & current year on Form-2 regarding meeting Eligibility Criteria?	2.10 (VI)	Yes/No	

SL .N	Description of Item	Clause	Compliance	Remarks
8	The tenderers shall submit requisite information as per Form No.2, along with copies of Audited Balance Sheets duly certified by the Chartered Accountant/ Certificate from Chartered Accountant duly supported by Audited Balance Sheet.	2.10 (VI)	Yes/No	
9	Have you furnished Annual / Audit reports (along with details of year wise turnover / balance sheet) from registered Chartered Accountant for the last Three Financial Years?	2.10 (VI)	Yes/No	
10	Have you furnished Certified copy of JV agreement (MOU) in enclosed format (Annexure-1), in case of offer is from JV firm?	Annexure 1	Yes/No	
11	Have you kept the offer valid for a minimum period of 90 DAYS from the date of opening of tender?	2.12	Yes/No	
12	Have you quoted completion period correctly & precisely as per Para 2.13 of SCC?	2.13	Yes/No	
13	Have you enclosed a declaration that the tenderer accept all the terms and conditions of Railways? In case of deviations, have you furnished —Statement of Deviations as per Form-3?	2.10 (IX)	Yes/No	
14	Documentary evidence necessary to establish that tenderer possesses the requisite skill, technical expertise, technical and skilled manpower and necessary equipment's to execute complete work covered in the schedule with stipulated specifications /details.	2.10 (X)	Yes/No	
15	Have you enclosed List of Personnel, Organization available on hand and proposed to be engaged for the subject work?	2.10 (XIV)	Yes/No	
16	Have you submitted the filled in NEFT mandate form (Annexure-2)?	Annexure -2	Yes/No	
17	Have you noted the applicability of GST ACT 2017 for this tender	2.51	Yes/No	

SL				
.N	Description of Item	Clause	Compliance	Remarks
18	Have you read and agreed to the terms and conditions of the LC (Letter of Credit) in case tenderer opted for LC mode of payment	2.55	Yes/No	
19	Have you read and agreed to Payment of wages Act	2.62	Yes/No	
20	Tenderer to note that after issuing of LOA, the LOA details including labour details has to be uploaded in Shramik Kalyan Portal.	2.62	Yes/No	
21	Tenderer to note that payment/ advances /releasing of PG and SD will be done only when the required details are entered in Shramik Kalyan	2.62	Yes/No	
22	All the financial implications with rates and the quoting of schedules has to be done in FIN.OFFER.TAB only for this tender	2.10	Yes/No	
23	Have you gone through the Special conditions of contract of Similar nature of work	2.5.1	Yes/No	
24	Have you submitted the authorization letter along with the offers.	2.5.1 (1)	Yes/No	
25	Have you submitted If no RDSO approved firm is available in RDSO approval list for VOIP based TCCS at the time of tender opening, then the definition of OEM is Manufacturer of train control communication system (IP controller console equipment, emergency communication gateway, associated software incl. of communication software, voice recording software etc.) which has been installed and commissioned along with VOIP based emergency communication gateway for at least 10% or more Railway stations (rounded off to next integer) of the VOIP based TCCS work, as per the specification RDSO/SPN/TC/99/2012/Rev.2 or the latest RDSO spec with satisfactory performance [Note: 10% of 516 stations = 52 stations. Hence satisfactory performance certificate for	2.5.1 (2)		

SL .N	Description of Item	Clause	Compliance	Remarks
	commissioning of 52 stations or more with VOIP based control communication system and VOIP based emergency communication system to be submitted].			
26	Have you submitted the Make and Model of scheduled item with reference to RDSO specification RDSO/SPN/TC/99/2023 Ver.3.0 dtd.10.11.2023.	2.5.1 (4) & Annexure 3	Yes/No	
27	Have you submitted the Manufacture authorization and Certificate copy of Clause-by-Clause technical Compliance from OEM of Controller Console Equipment, Test room Console, Emergency Communication Gateway (ECGW) and DTMF Gateway shall be submitted along with the bid.	2.5.1 (5)	Yes/No	
28	Have you submitted the Test certificate / Test report of Controller Console Equipment, Emergency Communication Gateway (ECGW) and DTMF Gateway shall be submitted by the bidder along with the bid for Environment test,EMC tests and electrical safety test as per RDSO SPECIFICATION FOR VOIP BASED TRAIN CONTROL COMMUNICATION SYSTEM RDSO/SPN/TC/99/2023 Ver.3.0 dtd.10.11.2023	2.5.1 (7)	Yes/No	
29	Have you submitted the Self- Certification by the bidder as per Annexure 8	2.5.1 (3,6 & 8) & Annexure 8	Yes/No	
30	Have you submitted Local content certificates from individual manufacturers by tenderer/bidder & OEM as per Annexure 4. Additionally, an overall local content certificate from the tenderer/bidder for the entire tender must be submitted.	2.5.1 (j), 2.68 & Annexure 4	Yes/No	

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End of chapter 3

Annexure-8

FORMAT FOR SELF-CERTIFICATION BY THE TENDERER

I/We, [Name of Tenderer], hereby declare the following:

- The VOIP based Train Control and Communication System (TCCS) work has been executed in strict accordance with the specifications outlined in RDSO/SPN/TC/99/2023 Ver.3.0 dated 10.11.2023 or the latest version thereof.
- The Communication Server, NMS Server, and Voice Recording Server hardware utilized in this project are sourced from reputed manufacturers as per the requirements specified in RDSO/SPN/TC/99/2023 Ver.3.0 dated 10.11.2023 or the latest version thereof.
- 3. Inspection of the implemented systems has been conducted by RDSO using the RDSO Test Format TC-F-8.1-2 effective from 06.02.2024.

Signature:
[Name & Designation]
[Seal]

Date of Declaration:

CHAPTER – 4 SCHEDULE OF WORKS AND SUPPLIES (For Technical Bid Reference)

Instructions for Quoting Rates in Financial Bid (Packet II):

SL No.	Schedule	Scope	Instruction/Remarks
1.	Schedule –A	SOR Items (S&T)	Detailed schedule has been uploaded on IREPS web site www.ireps.gov.in Tenderer has to submit single percentage for this schedule
2.	Schedule -B	Non SOR Items (S&T)	Detailed schedule has been uploaded on IREPS web site www.ireps.gov.in Tenderer has to submit individual rate for each item in this schedule

Note:

- 1) Schedule of works and supplies available in Chapter-4 is to facilitate the tenderer to understand the scope of work and for reference only. However, rate shall be quoted in IREPS web portal only.
- 2) Refer Detailed Guidelines Chapter-4A for description about the schedules and Inspection clause.
- 3) There is no Volume-I&II in this tender
- 4) Tenderer is advised to digitally sign the chapter-4 and upload as part of Technical documents but not in the Financial Tab.
- 5) All rates must be submitted in the tab for financial offer only on the Etendering portal. The financial bid will be opened subsequently (on a date which will be notified later) for the tenderer who fulfil the laid down technical and financial eligibility criteria. The offers which are found techno-commercially ineligible will be dismissed.
- 6) Rates of stores, materials and works are to be quoted according to the (online web portal) proforma of "Schedule of work and supplies" (Financial Bid). Rates in the offer should be in Indian Rupees only. Offers in foreign currency will not be accepted.
- 7) Tenderers are requested to quote the single percentage for schedule A and individual rate for each item for schedule B in the Financial Bid in IREPS online web portal only.
- 8) The tenderer shall quote the complete rate for all items of works given in the schedule of works and supplies in the Financial Bid in IREPS portal only to complete entire scope of work and make system completely functional. Offer received for only part of schedule will not be considered and bid shall be rejected.

SCHEDULE OF WORKS

Name of the work Provision of VOIP based Train Control Communication System Over Southern Railway."

Schedule A (SOR items) -Telecom Works

S. No	SOR NO.	Description of work	Unit	QTY.
1	10_101	Excavation of cable trench in all kinds of soil except hard rocky areas including clearing of roots of trees, rocks, bushes etc. to a depth of 1.0 Mtrs and to a width of 0.3 Mtrs. Laying of cables is not included in this schedule.	Mtrs	15000
2	10_106	Excavation of trench to a depth of 1 Mtr. for track crossing of cables, laying of DWC/ RCC pipes with collar/coupling, refilling of trench by ramming and consolidating it as per the instructions of Railway representative at site. During excavation of trench it has to be ensured that the excavated soil does not mix with the ballast available. The depth of 1m trench shall be from the bottom of sleepers for track crossings. Laying of cables is not included in this schedule. (Supply of DWC/RCC pipes with couplers/ collars is not included in this schedule).	Mtrs.	100
3	10_107	Excavation of trench to a depth of 1 Mtr. for road crossing of cables, laying of DWC/ RCC pipes with collar/ coupling, refilling of trench by ramming and consolidating it and resurfacing it to the original position. Laying of cables is not included in this schedule.(Supply of DWC/RCC pipes with couplers/ collars is not included in this schedule).	Mtrs.	100
4	10_110	Provision of GI pipes (50/100mm dia) for cable laying in hard rocky area with off sets at both ends duly supported by concrete blocks of size 300mm x 300 mm x 300 mm at an interval of 2m. The ends of the pipes shall be closed with brick masonry abutments work so that no cable is exposed, The work shall be carried out as per the instructions of Railway representative at site. (Supply of GI pipes with couplings and laying of cables is not included in this schedule). [Stone jelly of size 20/25mm, bricks, sand, cement and all other miscellaneous materials required for the work shall be supplied by the Contractor].	Mtrs.	500
5	10_115	Refilling of cable trench 1m depth by 0.3m width throughout, with earth after laying of cables, and consolidating the trench by ramming and leveling.	Mtrs	15000
6	10_121	Supply of Double walled corrugated pipe - 103.5mm inner dia & 120mm outer dia conforming to specification No. IS 14930(Part 2): 2001 with one coupler for every 6m of pipe as specified in Vol.II of the Tender document. (Inspection by Consignee)	Mtrs.	200
7	10_122	Supply of GI pipes - 50mm dia -3.65mm thick as specified in Vol.II of the Tender document. (Inspection by Consignee)	Mtrs.	500

Schedule B (Non SOR items) –Telecom Works

NS ITEM No.	DESCRIPTION OF WORK	UNIT	QTY.	Inspection By
01	Supply of Communication and Voice Recording Server as per Clause 5.1 of Spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest. Server block shall be provided 1+1 or 1:1 Redundancy	Set	6	RDSO
02	Supply of Network Management Server as per Clause 5.2 of Spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest	Nos	6	RDSO
03	Supply of Portable Maintenance Terminal as per clause no 5.4 of Spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest	Nos	6	RDSO
04	Supply of Event Notification Gateway as per clause 9.2 of Spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest	Nos	6	RDSO
05	Supply of Desktop Client PC As per clause 5.3 of Spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest	Nos	6	RDSO
06	Supply of Controller Console (Shall be integrated as single unit) as per clause 6.0 of Spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest	Nos	51	RDSO
07	Supply of Test Room Console (Shall be integrated as single unit) as per clause 7.0 of Spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest	Nos	12	RDSO
08	Supply of Gateway for Emergency communication at HQ/way station as per clause 10.1 of Spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest	Nos	400	RDSO
09	Supply of Control IP telephones without hands free and gooseneck operation for way side station as per clause 8 of Spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest	Nos	1500	RDSO
10	Supply of Mobile Application for event notification gateway as per clause no. no. 5.2.2.7 & 9.2.4 of Spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest	Nos	90	RDSO
11	Supply and installation, testing and commissioning of 5 KVA online UPS with one hour backup. Detailed Specifications attached.	Nos	12	RITES

NS ITEM No.	DESCRIPTION OF WORK	UNIT	QTY.	Inspection By
NO.				
12	Supply and installation of UPS 1 KVA with 1 Hr back up. Detailed Specifications attached.	Nos	400	RITES
13	Supply, Installation, Testing and Commissioning of 24 port manageable Layer 3 switch with 4 Nos of 10G SFP port (fully loaded) and 24 Nos of GE port (fully loaded with 12 optical and 12 electrical SFP's) with all accessories as per Spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest.	Nos	12	RITES
14	Supply, Installation, Testing and Commissioning of 24 port Giga Bit layer 2 switch, 24 x 10/100/1000 BASE-T PoE ports • 4 x 1G (minimum) SFP+ ports with minimum PoE Power Budget of 370W or better with SFP Module (loaded) as per Spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest.	Nos	12	RITES
15	Supply, Installation, Testing and Commissioning of Layer-2 Switch, minimum 8+2 ports (8-10/100/1000BASE-T PoE and 2 SFP ports, 1000 BaseX SM) with optical modules as per Spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest.	Nos	566	RITES
16	Supply and Installation of 19" 9U Rack Wall/Pole Mount, with front Door Glass Door Type, all Doors should be Removable Type with all accessories Like Electrical fitting, Fan Tray, Patch Panel, Cable Manager, Spike Buster/ PDU. Detailed Specification attached.	Nos	400	RITES
17	Supply and Installation of 19" 12U Rack Wall/Pole Mount, with front Door Glass Door Type, all Doors should be Removable Type with all accessories Like Electrical fitting, Fan Tray, Patch Panel, Cable Manager, Spike Buster/PDU. Detailed Specifications attached.	Nos	116	RITES
18	Supply and fixing of 19" (42U) covered racks of size 2200mmx600mmx600mm complete with all fittings including DC fan (48v) - 2 Nos, and AC distribution panel (horizontal fitting) with power sockets with MCB protection (minimum 6 Nos of 230v -5/15A sockets combined) and other accessories. The body should be high quality cold rolled steel with wheel and caster arrangement, vented from door borders and rear doors for ventilation and reliable operation. Detailed Specifications attached.	Nos	6	CONSIGNEE
19	Supply and Installation of Lan extender as per RDSO spec. No RDSO/SPN/TC/82/2020 Rev 2.0 or latest.	PAIR	60	RITES
20	Supply and installation of 55-inch full HD commercial grade VDU.	Nos	6	RITES
21	Supply of E1 BER Tester. Detailed Specifications attached.	Nos	6	CONSIGNEE

NS ITEM	DESCRIPTION OF WORK	UNIT	QTY.	Inspection By
No.				
22	Supply of computer table & Chair. Detailed Specifications attached.	Set	6	CONSIGNEE
23	Supply of Tool Kit consisting of Optical power-meter, Multimeter, Ethernet Crimping Tool, Console cable, Wrist ripper, Universal Spanner Set, Screw Driver Set, Cutting plier, Wire Stripper, Industrial grade USB to Serial cable with all accessories. Detailed Specifications attached.	Set	12	CONSIGNEE
24	Supply and provision of earthing and bonding system as per RDSO spec. No. RDSO/SPN/197/2008 or latest.	Nos	6	RDSO
25	Supply of Surge protection device for 6 LAN networks, as per Spec. No. RDSO/SPN/TC/98/2011, REV.0 or latest.	Nos	400	RITES
26	Supply and installation of wall mountable RJ45 socket. Detailed Specifications attached.	Nos	1800	RITES
27	Supply and Installation of 3 Mtrs length CAT6 UTP patch chord (RJ45). Detailed Specifications attached.	Nos	2000	CONSIGNEE
28	Supply of RJ45 connector. Detailed Specifications attached.	Nos	5000	CONSIGNEE
29	Supply of OFC patch cord of 3 Mtrs length. Detailed Specification attached.	Nos	1200	CONSIGNEE
30	Supply of UTP CAT-6 cable (23AWG) cable conforming to TIA/EIA-568. C.2 or latest	Mtrs	25000	RITES
31	Supply and fixing of PVC casing and capping of size 25mm including drawing of UTP CAT 6 cable through it. Detailed Specifications attached.	Mtrs	25000	RITES
32	Supply of Armoured Single Mode Optical 12 Fibre ITU G-652 D. All Di electrical Self-Supporting Optical Fibre Cable ADSS Optical Fibre Cable.	Mtrs	25000	RITES
33	Supply and laying of permanently solid lubricated HDPE pipes (33mm inner dia, 40mm outer dia) as per Specification No. RDSO/SPN/ TC/45/2013 with revision 2.0 (Admt 1 &2) or latest with accessories.	Mtrs	22500	RITES
34	Blowing/Drawing of OFC cable in the permanently solid lubricated-HDPE telecom pipe (33mm inner dia). This work includes conducting necessary duct integrity test for solid lubricated HDPE pipe.	Mtrs	22500	-

NS ITEM	DESCRIPTION OF WORK	UNIT	QTY.	Inspection By
No.				
35	Supply of 12 fibre FDMS box loaded, conforming to GR No. GR/FDM-01/02.APR-2007, suitable for splicing all materials to be supplied by the contractors.	Nos	100	RITES
36	Splicing and Termination of 12 F OFC cable in the termination box.	Nos	100	-
37	Excavation of OFC cable joint pit and provision of RCC joint/loop chambers of 1.2m dia ,60cm height and 50mm thickness with 2 pieces top and bottom cover with holes for drainages (reinforcement as per DRG No. OFC/2009/17). This includes filling up of sand complete in the joint chamber after cable laying, back filling and consolidation of soil around the chamber, disposal of excess soil as per plan or as advised by railway engineer at site as well as transportation of joint chamber to site at every KM in the section.	Nos	25	
38	Supply and installation of joint enclosure conforming to Specification No. RDSO/ SPN/ TC/68/2014 Revision 1.0 or latest and splicing of Optic Fibre and testing of fibre for 1310: 1550 nm.	Nos	25	CONSIGNEE
39	Laying of cables in PF roofing subways with GI Sheet clamping. Necessary materials required for the work shall be supplied by the contractor	Mtrs	800	-
40	with concrete/plaster etc.		1000	-
41	HDD boring including insertion of High Density Polyethylene Pipes (HDPE) of size 110mm outer dia in the bore drilled along with couplers required, pulling of different size of signalling cables through HDPE duct by machine as instructed by railway representative. Boring trench shall be minimum 1.5m to 2mts below the platform, Road, Track and yard/midsection. Radio or any other detection system should be used for avoiding damage to existing underground utilities. Minimum horizontal distance of 50m to 100m should be taken up with a launching point. Transportation of HDD machine, fuel and other materials required for boring and pulling of cable etc. (Supply of HDPE DUCT is not included).	Mtrs	500	-
42	Horizontal drilling at a approximate depth of 1.65/1.2 m below the formation level of earth including insertion of DWC pipes along with couplings etc	Mtrs	4000	-

NS ITEM No.	DESCRIPTION OF WORK	UNIT	QTY.	Inspection By
NO.				
43	Supply of 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 No. IS 4984: 2016 with latest amendments and Material Grade: PE 80., PN6.	Mtrs	4500	RITES
44	Installation, Configuration, Testing and commissioning of all communication servers, NMS Server, Voice Recording Server, Event Notification Gateways, Portable MT, Mobile application etc. as per RDSO spec. RDSO/SPN/TC/99 /2012 Rev 2 or latest	Set	6	-
45	Installation, Configuration, Testing and commissioning of Controller Console	Nos	51	-
46	Installation, Configuration, Testing and commissioning of Test Room Consoles.	Nos	12	-
47	Installation, Configuration, Testing and commissioning of Emergency Communication gateway at HQ/Way stations.	Nos	400	-
48	Installation, Configuration, Testing and commissioning of control IP telephone with handset used by wayside station ASM as per clause 8 of Spec No. RDSO/SPN/TC/99/2023 Ver.3.0 or latest.	Nos	1500	-
49	Training for railway personnel for maintenance and troubleshooting for entire network and application for VOIP based TCCS.	Man weeks	45	-

**** END OF CHAPTER - 4 ****

CHAPTER-4A

DETAILED GUIDELINES FOR SCHEDULE OF WORKS & SUPPLIES

1.INSPECTION OF EQUIPMENTS/MATERIALS

Supply of materials as per the scope of schedule of works shall be with inspection as detailed below:

I. WITH RDSO INSPECTION

- NS 1- Supply of Communication and Voice Recording Server
- NS 2- Supply of Network Management Server
- NS 3 -Supply of Portable Maintenance Terminal
- NS 4- Supply of Event Notification Gateway
- NS 5- Supply of Desktop Client PC
- NS 6- Supply of Controller Console
- NS 7- Supply of Test Room Console
- NS 8- Supply of Gateway for Emergency communication at HQ/way station
- NS 9- Supply of Control IP telephones with hands free operation with attachable gooseneck microphone for way side station
- NS 10- Supply of Mobile Application for event notification gateway
- NS 24 Supply and provision of earthing and bonding system

II. WITH RITES INSPECTION:

- NS 11- Supply and installation, testing and commissioning of 5 KVA online UPS with one hour backup
- NS 12 Supply and installation of UPS 1 KVA with 1 Hr back up
- NS 13- Supply, Installation, Testing and Commissioning of 24 port manageable Layer 3 switch with 4 Nos of 10G SFP port (fully loaded)
- NS 14 Supply, Installation, Testing and Commissioning of 24 port Giga Bit layer 2 switch, 24 x 10/100/1000 BASE-T PoE ports, 4 x 1G (minimum) SFP+ ports with minimum PoE Power Budget of 370W or better with SFP Module (loaded)

- NS 15- Supply, Installation, Testing and Commissioning of Layer-2, 8 port POE smart manageable switch with two fibre ports (1G SFP loaded)
- NS 16- Supply and Installation of 19" 9U Rack Wall/Pole Mount, with front Door Glass Door Type, all Doors should be Removable Type with all accessories
- NS 17- Supply and Installation of 19" 12U Rack Wall/Pole Mount, with front Door Glass Door Type, all Doors should be Removable Type with all accessories
- NS 19- Supply and Installation of Lan extender
- NS 20- Supply and installation of 55 inch full HD Commercial grade VDU.
- NS 25- Supply of Surge protection device
- NS 26- Supply and installation of wall mountable RJ45 socket
- NS 30- Supply of UTP CAT-6 cable (23AWG) cable
- NS 31- Supply and Fixing of PVC casing and capping of size 25mm
- NS 32- Supply of Armoured Single Mode Optical 12 Fibre
- NS 33- Supply and Laying of permanently solid lubricated HDPE pipes
- NS 35- Supply of 12 fibre FDMS box
- NS 43- Supply of High-Density Polyethylene Pipes (HDPE) of 110 mm Outer Dia, 10 mm Wall Thickness, along with one coupler for every 6 Meters

III. WITH CONSIGNEE INSPECTION:

- NS 18- Supply and fixing of 19" (42U) covered racks of size 2200mm x 600mm x600mm complete with all fittings.
- NS 21- Supply of E1 BER Tester .
- NS 22- Supply of computer table & Chair.
- NS 23- Supply Tool Kit consisting of Optical power meter, multimeter, ethernet crimpling tool, console cable, wrist ripper, universal spanner set, screw driver set, cutting piler, wire stripper, industrial grade USB to serial cable

- NS 27- Supply and Installation of 3 Mtrs length CAT6 UTP patch chord
- NS 28- Supply of RJ 45 connector
- NS 29- Supply of OFC patch cords 3m length
- NS 38- Supply and installation of joint enclosure

Note: Guidelines on latest Public Procurement Policy & other related orders regarding "Make in India "issued by Government of India shall be scrupulously followed.

2.TECHNICAL SPECIFICATION

DETAILED GUIDLINES FOR WORKS & SUPPLY SCHEDULES

The detailed Specifications for the works which are to be carried out by the contractor are too stipulated here under: -

The work shall be carried out according to the drawings approved by the railways and shall conform to the provision in the schedule of works. The contractor shall be solely responsible for the proper execution of the work as per specification.

- Note 1: A test certificate and test report shall be furnished by the tenderer/OEM. The test agency conducting the environmental tests shall be an accredited agency and details of accreditation shall be submitted by the firm/OEM. The details of accreditation shall be as per existing RDSO norms.
 - 2: For Gateways to be provided at HQ In place of separate devices only one common device having all the types/combinations of following interfaces can be supplied. If one common device is supplied, it shall have all the features mentioned for each of the interfaces. In addition it shall have Dual 10/100/1000 Mbps Ethernet ports as network interface instead of 10/100 Mbps Ethernet ports. The device shall have sufficient resources to allow simultaneous use of all the ports.
 - **3:** For Gateways to be provided at stations: In place of separate devices, one common device having combination of gateways required at station (EC gateway, FXS gateway etc.) can be supplied. If one common device is supplied, it shall have all the features mentioned for each of the interfaces. The device shall have sufficient resources to allow simultaneous use of all the ports.

I. SPECIFICATIONS OF 5 KVA ON LINE UPS. (NS 11)

- 1. With one hour backup of suitable batteries.
- 2. It should work with the input of normal Indian single phase at 50 Hz.
- 3. Input for the UPS:
 - a. Voltage Range-180-275 VAC.
 - b. Frequency Range: 45 Hz -60Hz.
 - c. Power factor-greater than 0.95 at full load.
- 4. Output for the UPS:
 - a. Voltage Range-220/230/240 VAC.
 - b. Frequency Range: 50Hz +/- 0.1 Hz
 - c. Crest factor: 3:1.
- 5. The AC-AC efficiency shall be better than 95% for each module.
- 6. Each module should have an LCD display to show various status of the working of the UPS as well as LED indicators.
- 7. It should have a minimum of 2No. of 10A Indian sockets for connecting the load.
- 8. The UPS shall be supplied with maintenance free batteries to provide a backup of 1 hour at full load of 5 KVA. The UPS shall provide adequate charging current for charging the batteries provisioned.

- 9. UPS shall be equipped with an RJ-45 port for connecting it to an Ethernet LAN. It must supports SNMP v1/v2 so that the same can be monitored from a NMS using SNMP on the network,
- 10. OEM should be ISO 9001:2015 and ISO 14001:2015 certified.
- 11. It should conform to TL9000 Standard.

II.Specifications of 19" 9 U Rack (NS 16)

- 1. It should be a standard 19" closed floor mounted rack of 9U height.
- 2. The depth of the rack shall around 600 mm and the width shall be around 600mm
- 3. The rack should be provided with two horizontal cable managers and at two vertical cable managers installed on both the front sides of the rack.
- 4. Mount Type is Wall mount
- 5. The rack and its accessories shall be made of CRCA steel sheet with minimum gauge of 1.5mm
- 6. It shall have glass doors in the front, type of glass used in front door is Transparent Toughened Glass.
- 7. Suitable dust filter should be provided at the air inlet in the rack to reduce the dust inside the rack.
- 8. The rack should be nano-ceramic coated and powder coated with textured polyester light grey colour to 80-120 microns.
- 9. The rack should be equipped with two horizontal shelves to house data communication equipment. The height where the shelves shall be installed in the rack shall be adjustable.
- 10. Provision on the top and bottom of the rack shall be available for proper cable entry.
- 11. The rack should be equipped with vertical power distribution units (PDU) power strips.
- 12. Secure Locks has to be available.
- 13. One packet of mounting hardware shall also be supplied with the rack.
- 14. The rack must be IP54 certified in conjunction with solid gland plate.
- 15. The rack shall be equipped with a 01 cooling Fan for keeping the temperature of the installed equipment within limits for proper working.
- 16. OEM should be ISO 9001:2015 and ISO 14001:2015 certified.
- 17. It shall conform to UL2416 Standard.

Note: The depth of the rack shall be such that the Switches/Gateways that will be supplied against this tender shall fit in it properly. However, the depth of the rack shall not less than 600mm in any case.

III. Specifications of 19" 12 U Rack (NS 17)

- 1. WM SS-12U500 or higher
- 2. Basic Rack 12U/500 Rack/ Welded/WM/Off White
 - i. Glass Door/12U/WM/Grav
- 3. 1 Phase Power Distribution (1U=44.45)

Server /IT Rack mount power distribution unit, 1Ph, 230V, 8A, 50/60Hz, 2U standard with 6 X Indian Round Pin 5A, Inlet Plug type

6A Indian Round Pin, 8A Fuse - PDU Rating 1.8KVA/Side feed-1.5Mt/ Black

- 4. Cable Management Accessories: Horz. Cable Organizer/1U/Loop
- 5. Accessories
 - i. Cantilever Shelf/Type2/1U/Off White
 - ii. Mounting Hardware-CR (Pack of 20)
- 6. Rack Cooling: ITE / Server Rack Air Circulation module/90CFM
- 7. Conforms to DIN 41494 or Equivalent EIA /ISO / EN / CEA Standard

IV.Specifications of 19" 42U Rack. (NS 18)

- The size of the cabinet shall be approximately 2200 mm X 600 mm X
- 2. Rack should be conforming to DIN41494 or equivalent EIA/ISO/EN standard.
- 3. The shelf's heights shall be adjustable to accommodate the equipment.
- 4. The cabinet shall be able to house server, switch and storage device of all reputed make, work station, UPS & other accessories.
- 5. It shall have a front door of glass with venton side trims & dual rear door of fully perforated steel.
- 6. Frame & side panels are made of heavy grade CRCA steel in light gray colour between 80-120 Microns.
- 7. Rack should have five universal shelves with a separate pair of mounting brackets for the rear which make it possible to adapt to different mounting dimensions between the 19" vertical angles to mount servers, switches, storage devices, industrial PC, monitor, UPS etc.
- 8. A sliding key board tray shall be fitted at a suitable height inside the rack so that key board can be easily taken out of the rack for operation of system.
- 9. The front door shall be of double door type. One of front door shall be fitted below the rotary keyboard tray and the other should be fitted above the rotary keyboard tray, keeping a clear space for rotary key board so that the key board can be taken out without opening the front doors
- 10. Rack should be provided with 2 two universal shelves with a separate pairs of reducing Channels along with the mounting hardware and fasteners, support angles in pairs rated for 50 kgs, equipment Mounting Angles in pairs and 4 nos. telescopic slides meant for the housing of rack-mount electronic equipment in 19" enclosure systems of high quality steel ball bearing slides for a variety of load-ratings and applications.
- 11. 19" mountable fan trays, top-mounted fan housing units with either 4 or 2 cooling fans (230 VAC 90CFM) should be fitted to the underside of top cover.
- 12. The AC Mains Distribution box has a 32Amp MCB, a neon indicator and a 3meter cable for connection to the external power source. It should have horizontally six octagonal 5/15A sockets with 6A MCB

- along with Spike Suppression and vertically IECC1312x10Amp, C94x16Amp with 32Amp MCB.
- 13. Copper earthing bars and straps should be available for providing good quality electrical ground connections.
- 14. Cable Manager 2U, 19" Mounting, cable channel with cable Loops, cable extender, cabling bobbins, cable retention bobbins, cable management & retention panel should also to be provided in sufficient numbers.
- 15. Monitored fan tray to automatically control the operation of four cooling fans with built-in temperature sensors for an accurate measurement of temperature should be provided inside the cabinet.
- 16. A suitable dust filter should be provided at the air inlet.

Note: The depth of the rack shall be such that the Servers, Switches and Gateways that will be supplied against this tender shall fit in it properly. However, the depth of the rack shall not less than 600mm in any case.

V.1 KVA ups with 1 hour back up (NS 12)

- 1. With one hour backup of suitable batteries.
- 2. It should work with the input of normal Indian single phase at 50 Hz.
- 3. Input for the UPS:
 - a. Voltage Range-180-275 VAC.
 - b. Frequency Range: 45 Hz -60Hz.
 - c. Power factor-greater than 0.95 at full load.
- 4. Output for the UPS:
 - a. Voltage Range-220/230/240 VAC.
 - b. Frequency Range: 50Hz +/- 0.1 Hz
 - c. Crest factor: 3:1.
- 5. The AC-AC efficiency shall be better than 95% for each module.
- 6. Each module should have an LCD display to show various status of the working of the UPS as well as LED indicators.
- 7. It should have a minimum of 2No. of 10A Indian sockets for connecting the load.
- 8. The UPS shall be supplied with maintenance free batteries to provide a backup of 1 hour at full load of 1 KVA. The UPS shall provide adequate charging current for charging the batteries provisioned.
- 9. UPS shall be equipped with an RJ-45 port for connecting it to an Ethernet LAN. It must supports SNMP v1/v2 so that the same can be monitored from a NMS using SNMP on the network,
- 10. OEM should be ISO 9001:2015 and ISO 14001:2015 certified.
- 11. It should conform to TL9000 Standard.

VI. E1 BER Tester: - (NS 21)

The **Specifications of** E1 BER Tester should meet the following:

Bit Rate	2084kb/s ± 50ppm

Connector	Standard: 75 ohms unbalanced; high resistance input impedance Optional: 120 ohms balanced
Input Sensitivity	0dB~-43dB
Frame Type	Framed N*64Kbps/ unframed, PCM30, PCM30C, PCM31, PCM31C
Test Pattern	Random pseudo code: 2^15-1, 2^11-1, 2^7-1 Fixed code: 1111,0000,1010
Alarm Insertion	LOS, LOF, AIS, RA
Error Code Insertion	Single,10E-3,10E-5,10E-7
Result Analysis	G.821, G.826 and M.2100
Port	Standard: BNC
Line Coding	HDB3
LCD	3.5-inch colour LCD
Measuring Standard	G.821, G.826, M2100
Clock Source Selection	Internal Clock (Internal), Receive Clock (Receive)
Bit Rate	2048kb/s ± 50ppm
Data Storage	4GB storage >100000 results, SD card
Interface	USB
Power Supply, Operating Time	Built-in Lithium-ion rechargeable battery, >8hrs operation (>15hrs standby)
Storage/ Operating Temperature/ Relative Humidity	-20°C to +60°C/ -10°C to +50°C/ < 90%RH
Standard Accessories	Carrying bag, SD card, USB, AC/DC adaptor, 75 ohms cable and manual
Optional Accessories	Balanced 120 ohms convertor (75 to 120 ohms)

VII. Computer table and Chair: - (NS 22)

The computer table and Chair supplied should be with Chair which has to meet the requirement as per the schedule with standard make and model

i. Specifications of Computer table:

Type of Computer Table	Computer table with key board drawer and table top
Size of Computer Table ±10 mm (LXBXH)	1000 Mm X 600 Mm X 750 Mm
Construction of Computer Table	Steel members duly welded and rigid fixed table top, with slideable key board tray, drawer, modesty panel, foot rest and also with another shelf at the bottom side for placing CPU and other peripherals
Top Extended by	50 mm on all sides over the steel frame

ii. Specifications of Chair:

- Width-76 cm
- Depth-76 cm
- Height- 77.5 to 89 cm
- It has to come with Centre Tilt Mechanism, Tilt Locking, Swivel Mechanism, Twin wheel castors, Pneumatic height adjustment
- The seat and the backrest has to made up of moulded polyurethane foam.

VIII. TOOL KIT: (NS 23)

- I. Wrist ripper
- II. Universal Spanner Set
- III. Screw Driver Set
- IV. Cutting plier
- v. Wire Stripper
- VI. Industrial grade USB to Serial cable with all accessories.
- **VII.** Optical power meter:
 - Comfortable LCD display and optional backlight LC
 - D display supports night operation
 - o Power measurements in dBm or mw and insertion loss in dB
 - Low battery consumption, more than 240 hours continual operation time for three 1.5V alkaline batteries
 - o minutes Auto-off function can be activated or deactivated.

Wavelength(nm)	800~1700nm
Detector	InGaAs
Measurement Range (dBm)	-70~+6
Uncertainty	±5%
Calibrated Wavelength(nm)	850,980,1300,1310,1490,1550
Resolution(dB)	0.01
Optical Connector	FC (interchangeable SC, ST) / as
	well as 2.5mm universal
Power Supply	Alkaline Battery (3 AA 1.5V
	batteries)
Battery Operating Time	240 h with 1.5V Battery (3)

Operating Temperature (°C)	-10 ~ +60
Storage Temperature (°C)	-25 ~ +70
Relative Humidity	0 to 95% (non-condensing)
Dimension	23.5*16*8cm
Weight	0.5kg

VIII. Multimeter:

Type of Product	Digital Multimeter
Counts	6000 Count
Frequency Range (Hz)	50Hz - 100 kHz
Capacitance Range (F)	50nF - 100μF
Display	LCD
Operating Temperature	0° to 40°C
Storage Temperature	-30° to 40°C
Voltage Accuracy (DC)	±1.5% + 3 Digit
Input Power	2 x AAA Batteries
Relative Humidity	<80% RH
Voltage Accuracy (AC)	±3.0%+3 Digits
Resistance Accuracy	+1.5%+3 Digit
Voltage Range (AC)	600mV-600 V
Voltage Range (DC)	6-600 V
Resistance Range (Ohm)	0-400 ΜΩ
Weight (g)	160 gm
Dimensions	130x65x27 mm
Standard Accessories	TL75 Test leads, 2 AAA Batteries (installed) User's manual

IX. Console cable:

Connector Type	USB 2.0, RJ45
Compatible Devices	Laptop, Router, Modem, Personal Computer, server,

	switches.
Connectivity Technology	USB
Cable Length	11.5 feet
Data Transfer Rate	20.00 megabits per second
Connector Gender	Male-to-Male

X. Ethernet Crimping Tool:

- For crimping Modular Plug RJ-45 / RJ-12 / RJ -11 types of connections
- Embedded flat cable cutter and stripper
- Made of corrosion resistant surface for durability
- Designed with key ways in 8P, 6P and 4P modular holders

IX. RJ45 Socket:- (NS 26)

The RJ 45 socket supplied should meet

- RJ45 sockets with LCS³ quick-fixing crimp connector Take AWG 22 single-core cables up to AWG 26 and AWG
- UTP 8 contacts

X. 3 Mtrs length CAT 6 UTP patch chord (RJ45) (NS 27)

It should meet the following spec.

- Pairs Unshielded Twisted Pair (UTP) Cable
- Conductor Metal: Bare Copper
- Colour Code: Gray
- Conductor: 24 AWG
- Insulation Material: HD-PE
- Jacket Material: PVC UL94V-0
- Heat-resistant: 60 degree Celsius minimum (Temperature limited)
- Flame property: The purpose of the vertical flame test is to screen out flammable wires. It follows the VW-1 (UL); FT-1 (CSA) standards.

XI. RJ 45 connector: - (NS 28)

The RJ45 connector supplied should be with standard make or better to meet the requirements:

- RJ45 modular plug supports 4 twisted pairs, 8 positions, 8 connectors of 100pcs/Pack
- Housing: PC, UL94V-2, transparent colour
- Contact Terminal: Copper Alloy
- Finished: 03MU micro-inch gold plating
- Operating temperature:-40°C to 80°C

 Use for 24-26 AWG stranded wires meet wiring scheme T568A/T568B

XII. OFC Patch card 3m length: - (NS 29)

- 1. OFC patch cords & pig tails as per RDSO specification No. RDSO/SPN/TC/69/2007 Rev.0 or latest.
- 2. OFC Patch card 3m length shall be with suitable connector (LC-SC/SC-SC/LC-LC/FC-LC) for the switch as per site requirement.

XIII. PVC casing & capping of size 25mm. (NS 31)

- Supply & fixing of PVC pipe of minimum 25MM Size or higher as per requirement at site on the wall /floor etc. using bends, coupler and T joints and flexible pipe where ever necessary with fixtures (All the required material for fixing to be arranged by the contractor)
- 2. PVC casing and capping shall be of good quality and same shall be approved by Engineer in charge

3. <u>Pre-Commissioning Check List</u> (Uploaded separately in IREPS).

Pre-Commissioning Check List for VoIP based Train Control Communication System to be followed as per RDSO Doc no. TC-C-7.1-002 Dt: 13.08.2024.

4. Proof of Concept Guidelines (PoC):

RDSO has not yet issued the detailed procedure to carry out the POC for the VOIP-based TCCS system. The POC will be conducted if RDSO issues the guidelines on or before the opening of the tender as mentioned below:

- i) POC, as issued by RDSO PoC guidelines, to be carried out as per the Railway's Schedule of Requirements at Railway or OEM premises in the presence of Railway/RDSO official from tenderers within a period of 45 days from the date of tender opening.
- ii) Compliances of RDSO/SPN/TC/99/2023 Ver.3.0 dated 10.11.2023 should be ensured as per RDSO directives.
- iii) PoC shall be carried out preferably in RDSO Lab or in any of the nominated Sections/Division, if field inputs are required. For some functionalities, which may not be possible to demonstrate in RDSO Lab or field, may be demonstrated in Govt./NABL accredited Lab/OEM Premises.
- iv) If a tenderer/OEM intends to carry out the POC at Railway premises, note that the place of POC test will be communicated later. In this case, Tenderer/OEM must bring all equipment and associated material required for POC. Railways will only provide power supply required for equipment (however tenderer/OEM may also make their own power supply arrangements if needed). Without disturbing the existing railway setup and as instructed by the Railway representative, POC should be set up and carried out. Railway site is to be cleared immediately in all respects after completion of POC.
- v) No charges shall be levied for PoC in RDSO Lab or field, however, charges of Govt./NABL accredited Lab shall be borne by the OEM, if any.
- vi) OEM shall submit the following documents/details along with application for PoC to RDSO:
 - a) Details of equipment under test (EUT), its OEM, model, version etc.
 - b) Test certificate for Environmental, Safety, EMI / EMC, Vibration, etc. as per TAN/FRS/RDSO specs. of the item.

- c) All regulatory certification like Telecom Trusted Portal Certification, MTCTE Certification, WPC certification, STQC certification, ISO Certification, etc. as applicable for the item.
- d) Self-certification for clause wise compliance of TAN/FRS/RDSO specs.
- vii) Each OEM is required to carry out only one Proof of Concept (POC) that can be used by all associated tenderers who work with a given OEM. This requirement applies when the tenderers offer the same make and model of VOIP TCCS system. To summarize, only one PoC shall be conducted per OEM, and the results of this POC shall be taken into consideration for the evaluation of technical bids associated with the OEM.
- viii)Technical bids will be evaluated only after completion of POC formality and submission of POC alone does not imply technical eligibility of the bid. Overall technical bids will be evaluated as per the clauses in the tender document. No extension will be entertained for the submission of POC.
- ix) After awarding contract, during course of execution up to the completion of the project, if any breach in technical specification/ features of Railway requirements found at any stage i.e., up to completion of project, the contract shall be terminated.
- x) All correspondence pertaining to the POC with tenderers shall occur through the IREPS portal/email. Tenderers are mandated to submit the Complete POC report through IREPS portal/email.

5. SOURCES FOR SPECIFICATIONS / DRAWINGS

- 1. IRS Drawings and Specification including RDSO Specific Director General, R.D.S.O., Lucknow.
- 2. TEC Drawings & Specifications Telecommunications Engineering Centre, KurshidLalBhawan, Janpath, New Delhi 110 001.
- 3. Standard Specifications (BSS & ISS, etc.) Indian Standard Institution, 9, Mathura Road, New Delhi.
- 4. Railway Publications such as Railway Rules, Codes and Practices, etc. Government of India, Ministry of Railways, Rail Bhawan, New Delhi.
- 5. Central Government Laws and Acts Government of India, Ministry of Information, Publications Division, Tilak Road, New Delhi.
- 6. Manual of Instructions for Installation of S&T Equipment 25KV 50 Hz, single phase Electrified section Director General, R.D.S.O., Lucknow.
- 7. General and Subsidiary Rules of Indian Railways and Southern Railways

Note: For bidding the list is not exhaustive and any specification /drawings as required can be obtained on request from office of Dy. CSTE/Projects-I /MS

6. Uploaded Separately in IREPS

- GENERAL CONDITIONS OF CONTRACT April 2022 and Adv. correction slip No 1 to 7
- 2) VOIP BASED TCCS SPECIFICATION NO. RDSO/SPN/TC/99/2023 Ver. 3.0
- 3) LOCAL CONTENT RB Lr.ED/Tele No.2020/Tele/15(18)/1 dt:26.11.2021
- 4) Pre-Commissioning Check List for VoIP TCCS as per RDSO Doc no. TC-C-7.1-002 Dt: 13.08.2024.