रेल विकास निगम लिमिटेड
Rail Vikas Nigam Limited

BIDDING DOCUMENT

(For e-tendering through IREPS)

VOLUME-1

FOR

"Design, Supply, Installation, testing & commissioning of Indoor Signal and Telecommunication work from Mangliyagaon (Incl.) to Budni (Incl.) Section with provision of Electronic Interlocking in 14 stations viz Pannod, Semaliyachau, Chapda, Kheri, Hathnora, Deoli, Kannod, Khategaon, Pipaliya Nankar, Bapcha, Nasrullahganj, Salkanpur, Balkhera, Budni and alteration in existing interlocking system at Mangliyagaon station in connection with New Single Broad Guage Rail Line Between Indore to Budni in the state of Madhya Pradesh, India".

(Based on SBD updated upto Amendment No.87 dated 25.02.2025 for e-tendering through IREPS)

RAIL VIKAS NIGAM LIMITED
World Trade Center, Tower A 6th to 9th floor, Nauroji
Nagar New Delhi-110 029
Tel +91-11-26738517
Fax +91-11- 26738592

IFB No: RVNL/S&T/BPL/INDB-BNI/PKG-1D (INDOOR) Revised Date: 03/02/2026

Signature Not Verified
Digitally signed by RAGHVENDRA SARASWAT
Date: 2026.02.03 12:45:02 IST
Reason: IREPS-CRIS
Location: New Delhi

PART I

Bidding Procedure
Submission of bids
for e-tendering through IREPS

IFB No: RVNL/S&T/BPL/INDB-BNI/PKG-1D (INDOOR) Revised Date: 03/02/2026

B I D D I N G D O C U M E N T S

(through e-Tendering Mode)

For
Execution of

"Design, Supply, Installation, testing & commissioning of Indoor Signal and Telecommunication work from Mangliyagaon (Incl.) to Budni (Incl.) Section with provision of Electronic Interlocking in 14 stations viz Pannod, Semaliyachau, Chapda, Kheri, Hathnora, Deoli, Kannod, Khategaon, Pipaliya Nankar, Bapcha, Nasrullahganj, Salkanpur, Balkhera, Budni and alteration in existing interlocking system at Mangliyagaon station in connection with New Single Broad Guage Rail Line Between Indore to Budni in the state of Madhya Pradesh, India".

IFB No: RVNL/S&T/BPL/INDB-BNI/PKG-1D (INDOOR) Revised Date: 03/02/2026

PROJECT:-"**New Rail line project in INDB-BNI (198 Kms)** "

Employer:Rail Vikas Nigam Limited
World Trade Center, Tower A 6th to 9th floor,
Nauroji Nagar New Delhi-110 029

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PART I

BIDDING PROCEDURES

Invitation for Bids

Section 1. Instructions to Bidders for bidding through e-tendering mode

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NOTICE

FOR

INVITATION FOR BIDS

(IFB)

(through e-Tendering mode)

Rail Vikas Nigam Limited
DOMESTIC COMPETITIVE BIDDING

INVITATION FOR BIDS
(Through e-tendering mode)

Bid Notice No:
RVNL/S&T/BPL/INDB-BNI/PKG-1D (Indoor) Revised Date: 03/02/2026

1. RAIL VIKAS NIGAM LIMITED (RVNL), having its Corporate office at World Trade Center, Tower A 6th to 9th floor, Nauroji Nagar New Delhi-110 029, India which is a Public Sector Enterprise set up as a wholly owned Government Company under the provisions of Section 617 of Companies Act., invites bids under single stage two packet system for the work of **"Design, Supply, Installation, testing & commissioning of Indoor Signal and Telecommunication work from Mangliyagaon (Incl.) to Budni (Incl.) Section with provision of Electronic Interlocking in 14 stations viz Pannod, Semaliyachau, Chapda, Kheri, Hathnora, Deoli, Kannod, Khategaon, Pipaliya Nankar, Bapcha, Nasrullahganj, Salkanpur, Balkhera, Budni and alteration in existing interlocking system at Mangliyagaon station in connection with New Single Broad Guage Rail Line Between Indore to Budni in the state of Madhya Pradesh, India".**

1.

Sl. No.	Approx. Estimated Cost of Project(in ₹)	Bid Security In ₹	Period of Completion
1.	Rs. 45.67 Crores (Rupees Forty Five Crores & Sixty Seven Lakhs only)	91.34 Lakh	36 Months

2. Bidders are advised to note the eligibility and minimum qualifying criteria specified in the Instruction to Bidders and Section 3 "Evaluation and Qualification Criteria" of bid document.

3. Bids must be accompanied by a Bid Security of required amount in the forms as specified in the bidding documents and shall have to be valid up to 26.08.2026. Bidder has to select the payment option as "Online mode or Bank Guarantee/e-Bank Guarantee or Insurance Surety Bond" to pay the EMD as applicable and enter details of the instrument. In case of Bank Guarantee/e-Bank Guarantee or Insurance Surety Bond, scanned copy of the document should be uploaded along with bid. The original document should be delivered in person to the official nominated as indicated in the Bid Data Sheet within 5 working days of deadline of submission of bids. Non-submission of scanned copy of Bank Guarantee with the bid on e-tendering portal and/or non-submission of original Bank Guarantee/e-Bank Guaranteeor Insurance Surety Bond within the specified period shall lead to summary rejection of bid. The details of the BG or Insurance Surety Bond 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.

Special Provisions for Micro and Small Enterprises (MSEs): MSEs registered with District Industries Centers / Khadi and Village Industries Commission/ Khadi and Village Industries Board/Coir Board/ National Small Industries Corporation/ Directorate of Handicraft and Handloom/ 'UDYAM' – The Online Portal of MSME/ Any other body specified by Ministry of MSME are exempted from the payment of RFP document fee and proposal security for this tender (Refer Clause 44 of Section-1 ITB).

4. **Bidding Documents** can be downloaded free of cost from E-tendering portal of www.ireps.gov.inw.e.f. 11:00 Hrs. of 03/02/2026 and the bid can be submitted on the downloaded document.

   Please note that drawings, if any, referred in the bid document, but not uploaded with the bidding document, can be viewed in this office on any working day. The Tenderer can also have a copy of the same on payment of non-refundable cost of Rs. 5,000/- (Rupees Five Thousand only) by a crossed **Demand Draft** on any Scheduled bank payable at New Delhi drawn in favor of Rail Vikas Nigam Limited, New Delhi.

   It will be the responsibility of the bidder who is submitting the bid on downloaded bidding documents to check and see any Addendum/Corrigendum issued in this regard from the website from time to time and ensure submission of bid along with all Addendum/Corrigendum.

5. **Purchase Preference to Make in India**: The provisions of revised 'Public Procurement (Preference to Make in India) Order 2017' issued by Department of Industrial Policy and Promotion under Ministry of Commerce and Industry vide letter no. P-45021/2/2017-PP (BE-II) dated 16.09.2020, as amended from time-to-time up to 28 days prior to deadline for submission of bids shall be applicable. Purchase preference shall be applicable to the bidding process and award of the contract shall be done as per clause ITB 34.

6. **Pre-bid Meeting:** A pre-bid meeting will be held on 17/02/2026 at 11:30 hrs in Rail Vikas Nigam limited Office Bhopal at 174/2, Shakti Nagar, Opposite Alkapuri Gate No.1, Habibganj, Bhopal-462024 India or through Physical/video conference to clarify any issues and answer any queries on any matter relating to the services, as stated in the clause 7 of ITB.

7. **REGISTRATION**

   To participate in E-Tender, it is mandatory for Tenderers to get themselves registered with the IREPS (www.ireps.gov.in) and have User ID and Password.

   It is mandatory for all Tenderers to have Class-III Digital Signature Certified from any of the Licensed Certifying Agencies ('CA') to participate in E-Tendering of RVNL. (Tenderer can see the list of Licensed CAs from the link www.cca.gov.in in the name of the person who will submit the Online tender and is authorized to do so.)

   www.ireps.gov.in is the only website for submission of tender 'Vendor Manual' containing the detailed guidelines for E-Tendering is available on www.ireps.gov.in.

8. **PRCAUTIONS FOR SUBMITTING / PREPRATION OF BIDS THROUGH E-TENDERING**

Tender shall be submitted through Online mode only at www.ireps.gov.in Tender submitted by any other mode will not be accepted. All the requirement documents (legible) as mentioned in the bid document have to be uploaded along with the offer on www.ireps.gov.in

The detailed instructions of e-tendering can be read through website www.ireps.gov.in . The Addendum/Corrigendum, if any, shall be hosted on the website www.ireps.gov.in

The tender shall be accepted only in e-tendering mode and **no other mode** of submission shall be accepted. The supporting documents for eligibility Criteria are essentially required to be uploaded on the website www.ireps.gov,in along with Technical Bid. The **bid** shall be accepted through **Online mode only.**

Tenderers are required to give the Un-Conditional Offers. A Conditional Offer is liable to be rejected. RVNL reserves the rights to modify, expand, restrict, scrap, reject and re-float tender without assigning any reasons whatsoever.

For any help, please refer ""Learning center under E-Tender: Works , 1. "Instructions to Contractors"" containing the detailed guidelines for E-Tendering available on www.ireps.gov.in and on Helpdesk of IREPS: 011-23761525

9. **Date of Receipt and opening of Bids:** The completed Bids must be submitted through e tendering www.ireps.gov.in before 11:00 hrs. on 17/03/2026 and the same shall be opened at 11:30 hrs on same day.

10. **Address for Communication:** Interested eligible Bidders may obtain further information from the following address:

Sr Advisor S&T
Rail Vikas Nigam Limited
Bhopal Project Implementation Unit
174/2 Shakti Nagar, Habibganj
Bhopal - 462024.
Phone: 0755 - 4289909
E-mail: rvnlbplsnt@gmail.com

For any help, please refer ""Learnig centre under E-Tender: Works , 1. "Instructions to Contractors"" containing the detailed guidelines for E-Tendering available on www.ireps.gov.in and on Helpdesk of IREPS: 011-23761525.

Section 1

Instructions to Bidders (ITB)

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Section 1: Instructions to Bidders (ITB)

A. General

1. Scope of Bid

1.1 In connection with the Invitation for Bids indicated in the Bid Data Sheet (BDS), Rail Vikas Nigam Limited (RVNL), a Government of India Undertaking, hereinafter referred to as the 'Employer', issues these Bidding Documents for the Procurement of Works as specified in Section 5: Works Requirements. The name, identification, number of contract(s) for the International Competitive Bidding (ICB) are provided in the BDS.

1.2 Throughout these Bidding Documents:

(a) the term "in writing" means communicated in written form and delivered against receipt;

(b) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and

(c) "day" means calendar day.

2. Source of Funds

2.1 The required funds have been sourced by RVNL, unless otherwise specified in the BDS.

3. Corrupt Practices

3.1 The Employer requires that bidders, suppliers, and contractors observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Employer:

(a) defines, for the purposes of this provision, the terms set forth below as follows:

(i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, of any thing of value to influence the action of any party in the procurement process or the execution of a contract;

(ii) "fraudulent practice" means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;

(iii) "collusive practice" means a scheme or arrangement between two or more bidders, with or without the knowledge of the Employer, designed to influence the action of any party in a procurement process or the execution of a contract;

(iv) "coercive practice" means harming or threatening to harm, directly or indirectly, persons, or their property to influence their participation in a procurement process, or affect the execution of a contract;

(b) will reject a Bid for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices

in competing for the Contract; and

(c) will sanction a party or its successor, including declaring ineligible, either indefinitely or for a stated period of time, to participate in Employer's activities, if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for, or in executing a contract of the employer.

4. Eligible Bidders

4.1 A Bidder may be a natural person, private entity, government-owned entity, or any combination of them with a formal intent to enter into an agreement or under an existing agreement in the form of a Joint Venture (JV). The bidder must ensure the following:

(a) In case of Single Entity:

(i) Submit Power of Attorney authorizing the signatory of the bid to commit the bidder.

(b) In case of Joint Venture:

(i) The number of partners in the JV shall not be more than that indicated in the Bid Data Sheet (BDS);

(ii) Submit MOU, as per form given in Section 4.

(iii) The JV shall nominate a Representative through Power of Attorney (Form given in Section 4) who shall have the authority to conduct all business for and on behalf of any and all the parties of the JV during the bidding process and, in the event the JV is awarded the Contract, during contract execution.

(iv) Submit Power of Attorney by individual partners to lead partners as per form given in Section 4.

(v) In case a Joint Venture is the successful bidder, the Joint Venture Agreement should be entered by the Joint Venture partners. The duly signed Joint Venture Agreement should be submitted along with the Performance Security to the employer after notification of the award of contract within 28 days.

(c) Foreign Firm(s) shall only be eligible to participate either as a single entity or as a partner in JV, if they have already opened project office in India and have to submit proof of the same along with the bid, failing which the bid shall be rejected.

(d) Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority as stated in DoE Order no 6/18/2019-PP dtd 23 July 2020 (Public Procurement No.1). However, it will not apply to bidders from those countries (even if sharing land border with India) to which the Government of India has extended lines of credit or in which the Government of India is engaged in development projects as stated in DoE Order no 6/18/2019-PP dtd 23 July 2020 (Public Procurement No.2) or any

amendments thereof.

1) "Bidder from a country which shares a land border with India" means:
   i. An entity incorporated, established or registered in such a country; or
   ii. A subsidiary of an entity incorporated, established or registered in such a country; or
   iii. An entity substantially controlled through entities incorporated, established or registered in such a country; or
   iv. An entity whose beneficial owner is situated in such a country; or
   v. An Indian (or other) agent of such an entity; or
   vi. A natural person who is a citizen of such a country; or
   vii. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
2) The beneficial owner for the purpose of 1) above will be as under:
   i. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

      Explanation—

      a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five percent of shares or capital or profits of the company.
      b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decision including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.

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

for entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

iv. Where no natural person is identified under (i) or (ii) or (iii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

v. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

(e) Eligible bidder can be either 'Class-I Local' or 'both Class-I Local and Class-II Local' or 'combination of Class-I Local, Class-II Local and Non-local', as defined below.

i. Class-I Local- means a supplier or service provider, whose goods, services or works offered for procurement meets the minimum local content of 50%.

ii. Class-II Local- means a supplier or service provider, whose goods, services or works offered for procurement meets the minimum local content of 20%.

iii. Non-local- means a supplier or service provider, who does not meet the requirements as per i and ii above.

The Bidders are required to submit a declaration using 'Form-MII' of Section 4 Bidding Forms.

In keeping with the Public Procurement (Preference to Make in India) Order 2017, as amended from time-to-time up to 28 days prior to deadline for submission of bids, in case any bidder, who does not meet the eligibility criteria as prescribed vide clause 4.1 above, shall participate at its own risk & cost and Employer shall not be liable for any loss or damage caused to the bidder.

4.2 Deleted.

4.3 A Bidder shall not have conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process, if, including but not limited to:

(a) they have controlling shareholders in common; or

(b) they receive or have received any direct or indirect subsidy from any of them; or

(c) they have the same legal representative for purposes of this bid; or

(d) they have a relationship with each other, directly or through common third parties, that puts them in a position

to have access to information about or influence on the Bid of another Bidder, or

(e) a Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the party is involved. However, this does not limit the inclusion of the same subcontractor in more than one bid; or

(f) a Bidder participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; or

(g) a Bidder was affiliated for any period(s)during last two years before the date of issue of Invitation for Bids with a firm or entity that has been hired (or is proposed to be hired) by the Employer as Engineer for the contract.

4.4 The bidder will be disqualified if:

a. The bidder or any of its constituents has been blacklisted/ banned business dealings for all Government Departments or by Ministry of Railways or by RVNL at any time till finalization of bids, except in cases where such blacklisting/ banning has been withdrawn by Competent Authority or has ceased on the deadline for submission of the bids, for which satisfactory evidence is to be produced.

b. Any previous contract of the bidder or any of its constituents had been terminated for contractor's failure or part terminated for its failure as a JV partner with forfeiture of its full Performance Security, by Rail Vikas Nigam Ltd.(RVNL) at any time starting from 3 years before the deadline for submission of bids and upto one day before the date of opening of price bids;

Provided, however, there is no stay order or declaration by any Court against such termination of the Contract by Rail Vikas Nigam Ltd. or such termination of the Contract has not been revoked by Rail Vikas Nigam Ltd or competent authority of RVNL has not passed an order of non-applicability of disqualification of the bidder or any of its constituents despite such termination.

c. The bidder or any of its constituents has been imposed delay damages of 5% or more of contract value by RVNL due to delay in the implementation of any previous contract within the period of last 2 years before the deadline for submission of bids (Period of 2 years shall be reckoned from the date on which the total accrued amount of Delay Damages has reached 5% or more of the contract price) or such accrued delay damages has not been fully recovered before the deadline for submission of bids on account of contractor's request for deferring recovery to maintain cash flow and RVNL has acceded to the same in the interest of the project or the work under the previous contract in question has not been completed before the deadline for submission of bids, unless imposition of such delay damages has been set aside by the Competent Authority.

d. The bidder or any of its constituents:

i. has suffered bank ruptcy/insolvency or

ii. has any ongoing case of insolvency before the NCLT/any Court where Interim Resolution Professional (IRP) has been appointedoris at any later stage of the insolvency process

On the deadline of submission of bids or thereafter till finalization of bids.

e. The bidder is found ineligible by the Employer, in accordance with ITB-3.

f. The bidder or its constituent(s) has been declared by RVNL to be a poor performer and the period of poor performance is still in force on the deadline for submission of bids.

OR

The bidder or its constituent(s) has been declared by RVNL to be a poor performer at any time after the deadline for submission of bids and upto one day before the date of opening of price bids.

g. The bidder or any of its constituents has changed its name or created a new business entity as covered by the definition of "Allied Firm" under para 1102 (iii) of Chapter XI of Vigilance Manual of Indian Railways (available on website of Indian Railways), consequent to having been banned business dealings or suspended business dealings or having been declared poor performer.

h. The bidder or any of its constituents is from a country which shares a land border with India and is not registered with the Competent Authority as stated in DoE Order no 6/18/2019-PP dtd 23 July 2020 .

i. Bidder is an Entity of such countries, which have been identified by the Railway Ministry as not allowing Indian Companies to participate in their Government procurements for any item related to Railway Ministry, shall not be allowed to participate, except for the list of items published by the Railway Ministry permitting their participation.

j. Bidder fails to disclose any previous transgressions made in respect of Code of Integrity [Rule 175 (1) of General Financial Rules 2017] with any entity in any country during the last three years or of being debarred by any other procuring entity

The Bidder shall submit an affidavit stating that they are not liable to be disqualified as per this sub clause using the appropriate Performa given in Section 4. Non-submission of an affidavit by the bidder shall result in summary rejection of his bid.

4.5 Bidders shall immediately inform the Employer in case they cease to fulfill eligibility in terms of ITB 4.3 & 4.4. In case the bidder fails to inform the Employer or submits a false affidavit his bid shall be summarily rejected and bid security shall be forfeited. The bidder shall also be liable for Banning of Business dealings for a period up to five years. .

5. Eligible Materials, Equipment and Services

5.1 The materials, equipment and services to be supplied under the Contract shall be from the approved sources as specified in Section 5: Works Requirements.

B. Contents of Bidding Document

6. Sections of Bidding Document

6.1 The Bidding Document consists of Volume-I (Parts I, II and III) and Volume-II, which includes all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8.

Volume-I

PART I: Bidding Procedures

Section 1: Instructions to Bidders (ITB)for submission of bids through e tendering portal

Section 2: Bid Data Sheet (BDS)

Section 3: Evaluation and Qualification Criteria (EQC)

Section 4: Bidding Forms (BDF)

PART II: Work's Requirements

Section 5: Work's Requirements (WRQ)

PART III: Conditions of Contract and Contract Forms

Section 6: General Conditions of Contract (GCC)

Section 7: Special Conditions of Contract (SCC)

Part A: Contract Data (CD)

Part B: Specific Provisions (SP)

Section 8: Contract Forms (COF) – Annexes to SCC

Volume-II

Bill of Quantities(BOQ)

6.2 The Invitation for Bids (IFB) issued by the Employer is not part of the Bidding Document.

6.3 The Employer is not responsible for the completeness of the Bidding Document and their Addenda, if they were not obtained directly from the source stated by the Employer in the Invitation for Bids.

6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of **the** bid.

7. Clarification of Bidding Document, Site Visit, Pre-Bid Meeting

7.1 A prospective Bidder requiring any clarification of the Bidding Document shall contact the Employer in writing at the Employer's address indicated in the BDS or raise his inquiries during the pre-bid meeting if provided for in accordance with ITB 7.4. The Employer will respond in writing to any request for clarification, provided that such request is received no later than twenty one (21) days prior to the deadline for submission of bids. The Employer shall forward copies of its response to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. Should the Employer deem it necessary to amend the Bidding Document as a result of a request for clarification, it shall do so following the procedure under ITB 8 and ITB 22.2.

7.2 The Bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.

7.3 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

7.4 The Bidder's designated representative is invited to attend a pre-bid meeting, if provided for in the BDS either in person or through video conferencing. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.

7.5 The Bidder is requested, as far as possible, to submit any questions in writing, to reach the Employer not later than one week before the meeting.

7.6 Minutes of the pre-bid meeting, including the text of the questions raised, without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3. Any modification to the

Bidding Document that may become necessary as a result of the pre-bid meeting shall be made by the Employer exclusively through the issue of an addendum pursuant to ITB 8 and not through the minutes of the pre-bid meeting.

7.7 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.

8. Amendment of Bidding Document

8.1 At any time prior to the deadline for submission of bids, the Employer may amend the Bidding Document by issuing addenda.

8.2 Any addendum/corrigendum issued shall be part of the Bidding Document.

8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Employer may, at its discretion, extend the deadline for the submission of bids, pursuant to ITB 22.2

C. Preparation of Bids

9. Cost of Bidding

9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

10. Language of Bid

10.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer, shall be written in English. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English in which case, for purposes of interpretation of the Bid, such translation shall govern.

11. Documents Comprising the Bid

11.1 The bidder shall submit both technical and financialbids through e tendering portal only.

11.2 Initially, only the Technical Bids are opened through e tendering portal.The Technical Bids are evaluated by the Employer. No amendments or changes to the Technical Bids are permitted. Bids with Technical Bids which do not conform to the specified requirements will be rejected as deficient Bids.

11.3 Price Bids of technically compliant Bids shall be opened through e tendering portal of RVNL at a date and time advised by the Employer. The Price Bids are evaluated and the Contract is awarded to the Bidder whose Bid has been determined to be the lowest evaluated substantially responsive Bid.

11.4 The Technical Bid shall contain the following :

(a) Scanned copy of Letter of Technical Bid in accordance with ITB

16;

(b) Scanned copy of Bid Security, in accordance with ITB Clause 19;

(c) Scanned copy of alternative Technical Bid, if permissible, in accordance with ITB Clause 13;

(d) Scanned copy of written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB Clause 20.2;

(e) Scanned copy of documentary evidence in accordance with ITB Clause 17 establishing the Bidder's qualifications to perform the contract; and

(f) Scanned copy of any other document required in the BDS.

11.5 The Price Bid shall contain the following :

(a) Scanned copy of Letter of Price Bid. ;

(b) Financial Rate Page under Financial offer completed online as per ITB 14

(c) Online alternative Price Bid corresponding to the alternative Technical Bid, if permissible, in accordance with ITB Clause 13; and

(d) any other document required in the BDS.

12. Bid Letters and Price Schedules

12.1 The Bidder shall submit the Technical Bid and the Price Bid online through e tendering portal using appropriate letter formats furnished in Section 4: Bidding Forms. These forms must be completed without any alterations to their format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.

12.2 The Bidder shall submit, as part of the Price Bid, including the Bill of Quantities through online e –Tendering portal.

13. Alternative Bids

13.1 Unless otherwise indicated in the BDS, alternative bids shall not be considered.

13.2 When alternative periods for completion are explicitly invited, a statement to that effect will be included in the BDS, as will the method of evaluating different periods for completion.

14. Bid Prices and Discounts

14.1 The prices quoted by the Bidder online in the Financial Rate Page under Financial offer of Bill of Quantities shall conform to the requirements specified below.

14.2 In the BOQ, quantity and unit rates and thereby the amount against each item have been indicated. From this, price of each schedule/bill has been worked out and indicated in the Financial Rate Page under Financial offer in BOQ. The Bidder shall quote rates as single percentage above/below/at par in figures as per format for each schedule/bill in the summary sheet**. The rates quoted by the bidder in** Financial Rate Page under Financial offer

will only be considered for evaluation of bids. Rates offered through any other medium or at any other location will not be considered.

14.3 Deleted

14.4 The Bidder can modify its bid and resubmit it any number of times through e Tendering portal before the deadline for submission of bids.Any other correspondence in connection with the bid is not permissible and shall not be considered in bid evaluation.

14.5 Unless otherwise provided in the BDS and the Contract, the rates and prices quoted by the Bidder are subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract. In such a case, the indices and weightings for the price adjustment formulae shall be as specified in the Tables of Adjustment Data included in Contract Data.

14.6 If so indicated in ITB 1.1, bids are being invited for individual contracts or for any combination of contracts (packages). Bidders wishing to offer any price reduction for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Price reductions or discounts shall be submitted in accordance with ITB 14.4, provided the bids for all contracts are submitted and opened at the same time.

14.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause (including standard specifications), as of the date 28 days prior to the deadline for submission of bids, shall be included in the rates and prices and the total Bid Price submitted by the Bidder.

14.8 Bidders should note that during the progress of the Works, the foreign currency requirements of the outstanding balance of the Contract Price may be adjusted by agreement between the Employer and the Contractor in order to reflect any changes in foreign currency requirements for the Contract, in accordance with Sub-Clause 14.15 of the Conditions of Contract. Any such adjustment shall be effected by comparing the percentages quoted in the bid with the amounts already used in the Works and the Contractor's future needs for imported items.

14.9 Bidder should note that non-submission of the Letter of Price Bid (LPB) and/or Summary sheet of BOQ by the bidder shall result in summary rejection of his bid.

15. Currencies of Bid and Payment

15.1 The bidder shall quote the unit rates and the prices entirely in the Indian Rupees.

16. Documents Comprising the

16.1 The Bidder shall furnish a commitment inLetter of Technical Bid(LTB)for deployment of equipment and personnel as stipulated

Technical Bid

in Section 5: Work's Requirement

16.2 The bidder shall furnish commitment in LTB for submitting construction method statement for all major activities of work and get this approved from the engineer prior to the commencement of work on that activity in case of award of contract.

16.3 The Bidder shall furnish commitment in Letter of Technical Bid (LTB) for adhering to mobilization and construction schedule as stipulated in Section 5: Work's Requirement.

16.4 Bidder should note that non-submission of the Letter of Technical Bid (LTB) by the bidder shall result in summary rejection of his bid.

17. Documents Establishing the Qualifications of the Bidder

17.1 To establish its qualifications to perform the Contract in accordance with Section 3: Evaluation and Qualification Criteria, the Bidder shall submit as part of its technical Bid the information requested in the corresponding information sheets included in Section 4: Bidding Forms.

17.2 Domestic Bidders, individually or in joint ventures, applying for eligibility for domestic preference shall supply all information required to satisfy the criteria for eligibility as described in ITB 34.

18. Period of Validity of Bids

18.1 Bids shall remain valid for a period of 120 days after the bid submission deadline date prescribed by the employer. A bid valid for a shorter period shall be rejected by the employer as non responsive.

18.2 In exceptional circumstances, the Employer may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a bid security is requested in accordance with ITB 19, it shall also be extended up to the date mentioned in the letter of request for extension. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request shall not be required or permitted to modify its bid.

19. Bid Security

19.1 Unless otherwise specified in the BDS, the Bidder shall furnish as part of its bid a bid security in original form and for the said amount of Indian Rupees as specified in the BDS.

19.2 If a Bid Security Declaration is required pursuant to ITB 19.1, it shall use the form included in Section 4 (Bidding Forms). The Employer will declare a Bidder ineligible to be awarded a contract for a period of 3 (three) years, if a Bid Security Declaration is executed.

19.3 If a Bid Security is specified pursuant to ITB 19.1, the bid security shall be, at the Bidder's option, in any of the following forms:

(a) A Cashiers or Banker's certified cheque or Bank draft drawn on a Scheduled/Nationalized Bank in India in favour of "Rail Vikas Nigam Ltd" payable at New Delhi; or

(b) An unconditional bank guarantee/e-Bank Guarantee using the Form given in Section 4: Bidding Forms. The bank guarantee/e-Bank Guarantee shall be from a bank having minimum net worth of over INR 500 million from the specified banks as under:

i. Scheduled Bank in India, or

ii. a Foreign Bank having their operations in India, or

iii. a Foreign Bank which does not have operations in India is required to provide a counter-guarantee by State Bank of India.

(c) An Insurance Surety Bond issued by a creditor / insurance company acceptable to the Employer.

The bid security shall be valid up to the date as mentioned in BDS, or up to the date mentioned in the letter of request for extension, if any under ITB 18.2.

In case the bidder has opted for Bid security in the form of an unconditional Bank guarantee/e-Bank Guarantee / Insurance Surety Bond, the bidder should upload the scanned copy of Bank Guarantee/e-Bank Guarantee / Insurance Surety Bond with the bid. The original Bank Guarantee/e-Bank Guarantee / Insurance Surety Bond should be delivered in person to the official nominated as indicated in the bid data sheet within 5 working days of deadline of submission of bids. Non-submission of scanned copy of Bank Guarantee/e-Bank Guarantee/ Insurance Surety Bond with the bid on e-tendering portal and/or non-submission of original Bank Guarantee/e-Bank Guarantee / Insurance Surety Bond within the specified period shall lead to summary rejection of bid. 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.

OR

In case of MSEs they should upload the scanned copy of their registration in place of scanned copy of bank Guarantee (Refer Clause 44 of Section 1 ITB).

19.4 Any bid not accompanied by an enforceable and compliant bid security or Bid Security Declaration, as required in accordance with ITB 19.1, shall be summarily rejected by the Employer as non-responsive.

19.5 The bid security of the Bidders who have been determined to be unqualified for opening of their financial bids shall be returned within 3 working days after the opening of financial bids. The Bid Security of unsuccessful bidders shall be returned within 3 working days after issue of LOA to the successful Bidder.

19.6 The bid security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required performance security.

19.7 The bid security may be forfeited (if required pursuant to ITB 19.1) Bank Guarantee/e-Bank Guarantee/ Insurance Surety Bond executed;

(a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bids, except as provided in ITB 18.2 or

(b) if a Bidder misrepresents or omits the facts in order to influence the procurement process;

(c) if the successful Bidder fails to:

(i) sign the Contract in accordance with ITB 40;

(ii) furnish a performance security in accordance with ITB 41;

(iii) accept the correction of its Bid Price pursuant to ITB 32.2; or

(iv) furnish a domestic preference security if so required.

(d) if the undertaking of the affidavit submitted by the bidder or its constituents in pursuance to ITB clause 4.4 or any of the declarations of Letter of Technical Bid or Letter of Price Bid submitted by the bidder has been found to be false at any stage during the process of bid evaluation.

19.8 The Bid Security of a JV shall be in the name of the JV that submits the bid. If the JV has not been legally constituted at the time of bidding, the Bid Security shall be in the names of all future partners as named in the letter of intent mentioned in ITB 4.1.

20. Format and Signing of Bid

20.1 The Bidder shall submit Technical Bid and the Price Bid as described in ITB Clause 11 through e tendering portal of www.ireps.gov.in

20.2 The Bid shall be digitally signed by a person dully authorized to sign on behalf of the bidder.

20.3 DELETED

D. Submission and Opening of Bids

21. Online submission and opening of bids

21.1 The Bidder shall submit the Technical and price bid through e tendering portal of www.ireps.gov.in

21.2 DELETED

21.3 DELETED

21.4 DELETED.

21.5 DELETED

21.6 No details about price proposal shall be disclosed directly or indirectly in the technical proposal failing which the bid shall be rejected.

22. Deadline for Submission of Bids

22.1 Bids must be received by the Employer through e tendering portal www.ireps.gov.inonly not later than the date and time indicated in the BDS.

22.2 The Employer may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

23. Late Bids

23.1 The e-Tendering portal cannot accept any bid once the deadline for the tender submission has lapsed.

24. Withdrawal, Substitution, and Modification of Bids

24.1 A Bidder may withdraw, or modify its bid after it has been submitted through e-Tendering portal before the deadline for submission of bids.

(a) DELETED

(b) DELETED

24.2 DELETED.

24.3 No bid may be withdrawn, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Letter of Bid or any extension thereof.

25. Bid Opening

25.1 The Employer shall conduct the opening of Technical Bidsthrough e-tendering portal of www.ireps.gov.in

25.2 The Price Bids will remain unopened until the time of opening of the Price Bids. The date, and time, of the opening of Price Bids will be

announced through e- tendering portal.

25.3 DELETED

25.4 DELETED

25.5 DELETED

25.6 DELETED

25.7 DELETED

25.8 At the end of the evaluation of the Technical Bids, the Employer will intimate bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified for award. The date and time of the opening of Price Bids will be advised through email.

25.9 The Employer will notify Bidders in writing who have been rejected on the grounds of being substantially non-responsive to the requirements of the Bidding Document and who have been determined as being not qualified as a result of evaluation of Technical Bid and their Price Bids shall not be opened. The bid security of the bidders shall be returned as per due process.

25.10 The Employer shall conduct the opening of Price Bids through e tendering portal of www.ireps.gov.in of all Bidders who submitted substantially responsive Technical Bids and who have been determined qualified as a result of technical evaluation.

25.11 DELETED

25.12 DELETED

E. Evaluation and Comparison of Bids

26. Confidentiality

26.1 Information relating to the examination, evaluation & comparison, pre-qualification of Bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on Contract award is communicated to all Bidders.

26.2 Any attempt by a Bidder to influence the Employer in the examination, evaluation & comparison and pre-qualification of the Bids or Contract award decisions may result in the rejection of its Bid.

26.3 Notwithstanding ITB Sub-Clause 26.2, from the time of opening the Technical Bids to the time of Contract award, if any Bidder wishes to contact the Employer on any matter related to the bidding process, it should do so in writing.

27. Clarification of Bids

27.1 To assist in the examination, evaluation & comparison and pre-qualification of the Bids, the Employer 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 Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change in the prices or substance of the Bid shall be sought, offered, or permitted, by the Employer in the evaluation of the Price Bids.

27.2 If a Bidder does not provide clarifications of its bid by the date and time set in the Employer's request for clarification, its bid may be rejected.

28. Deviations, Reservations, and Omissions

28.1 During the evaluation of bids, the following definitions apply:

(a) "Deviation" is a departure from the requirements specified in the Bidding Document;

(b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and

(c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.

29. Determination of Responsiveness

29.1 The Employer's determination of a bid's responsiveness is to be based on the contents of the bid itself, as defined in ITB11.

29.2 A substantially responsive bid is one that meets the requirements of the Bidding Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that,

(a) if accepted, would:

(i) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or

(ii) limit in any substantial way, inconsistent with the Bidding Document, the Employer's rights or the Bidder's obligations under the proposed Contract; or

(b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive bids.

29.3 The Employer shall examine the technical aspects of the bid submitted in accordance with ITB 16, Technical Bid, in particular, to confirm that all requirements of Section 5 (Works Requirements) have been met without any material deviation or reservation.

29.4 If a bid is not substantially responsive to the requirements of the Bidding Document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

30. Nonconformities, Errors, and Omissions

30.1 Provided that a bid is substantially responsive, the Employer may waive any nonconformities in the bid that do not constitute a material deviation, reservation or omission.

30.2 Provided that a bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the bid. Failure of the Bidder to comply with the request may result in the rejection of its bid.

30.3 Deleted

31. Pre-Qualification of the Bidder

31.1 The Employer shall determine to its satisfaction during the evaluation of Technical Bids whether Bidders are qualified to perform the Contract satisfactorily.

31.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 17, to clarifications in accordance with ITB Clause 27 and the qualification criteria indicated in Section 3: Evaluation and Qualification Criteria. Factors not included in Section 3: Evaluation and Qualification Criteria shall not be used in the evaluation of the Bidder's qualification.

31.3 An affirmative determination of technical bid shall be a prerequisite for the opening and evaluation of a Bidder's Price Bid. A negative determination shall result into the disqualification of the Bid, in which event the Employer shall return the unopened Price Proposal to the Bidder-

31.4 DELETED

31.5 DELETED

32. Correction of Arithmetical Errors and Omissions in Price Bid and Evaluation of Bid Price

32.1DELETED

(a) DELETED

(b) DELETED

(c) DELETED

(d) DELETED

(e) DELETED

(f) DELETED

(g) DELETED

32.2 DELETED

33. Conversion to Single Currency

33.1 For evaluation and comparison purposes the currencies of the bid shall be converted into Indian Rupees as stated in BDS.

34. Purchase Preference

34.1 The Purchase Preference shall be available to Class-I Local bidder. Margin of Purchase Preference (MPP) shall be as specified in Bid Data Sheet.

34.2 If a bidder or any of its constituents has been debarred by any procuring entity for violation of the 'Public Procurement (Preference to Make in India) Order 2017', shall not be eligible for preference for procurement for the duration of debarment. The debarment for such procuring entities shall take effect prospectively from the date on which it comes to the notice of the Employer.

35. Evaluation of Bids

35.1 The Employer shall evaluate Price Bids of each Bid for which the Technical Bids have been determined to be substantially responsive. The Employer shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.

35.2 To evaluate the price Bid of a bid, the Employer shall consider the following:

(a) the bid price, excluding Provisional Sums and the provision, if any, for contingencies in the Summary Bill of Quantities, but including Day Work items, where priced competitively;

(b) DELETED

(c) DELETED

(d) DELETED

(e) application of all the evaluation factors indicated in Section 3 (Evaluation and Qualification Criteria).

35.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.

35.4 If this Bidding Document allows Bidders to quote separate prices for different contracts, and the award to a single Bidder of multiple contracts, the methodology to determine the lowest evaluated price of the contract combinations, including any discounts offered in the Letter of Price Bid, is specified in Section 3 (Evaluation and Qualification Criteria).

35.5 If the bid, which results in the lowest Evaluated Bid Price is substantially on lower side and/or seriously unbalanced in the opinion of the Employer as per criteria defined below, the Employer may require the bidder to submit additional performance security as under:-

a) If overall price quoted by the L1 bidder is below the engineer's estimated price by more than 10% and the difference between overall price quoted by the L1 and L2 is more than 5% of the estimated price, then the bid price of L1 bidder shall be treated as substantially on lower side and such bidder shall be bound to furnish additional performance security equal to the (0.9x engineer's estimated price – L1 price) or (0.95 x L2 price – L1 price) whichever is lower, on this account. Example below demonstrates the method of calculation to arrive at additional performance security:

Suppose overall price quoted by the L1 bidder is 17% below the estimated price and the overall price quoted by L2 bidder is 8% below the estimated price. In this case the overall price quoted by the L1 bidder is lower by more than 10% of the estimated price and also the difference between overall price quoted by the L2 and L1 bidder is more than 5% of the estimated price, hence the L1 bidder shall be required to furnish additional performance security for an amount equal to

{0.9 x engineer's estimated price – (1-17/100) x engineer's estimated price} = {0.07 x engineer's estimated price} = 7% of engineer's estimated price or {0.95 x (1-8/100) x engineer's estimated price – (1-17/100) x engineer's estimated price} = {0.044 x engineer's estimated price} = 4.4% of engineer's estimated price; whichever is lower.

As per the above L1 bidder shall be required to submit additional performance security of 4.4% of engineer's estimated price.

b) If for any bill/ schedule of quantities % age above or below quoted by the bidder on the estimated price is beyond 15% below the overall % age difference between the quoted contract price and the engineers estimated price, then the price for that particular schedule shall be treated as seriously unbalanced and bidder shall be bound to furnish additional performance security for such unbalanced price. Example below demonstrates the method of calculation to arrive at unbalanced price and additional performance security:

Suppose for the L1 bidder overall % age difference between quoted contract price and the engineers estimated price;

(Overall contract price – Overall estimated price) x 100 ÷ overall estimated price = + 4 %

Maximum % age below permitted over estimated price of any bill / schedule in this case = +4 – 15 = -11%

Suppose for the L1 bidder has quoted 20% below estimated price of schedule "A" then the pricing of the schedule A shall

be treated as unbalanced and the bidder shall be required to furnish additional performance security for an amount equal to (20 – 11) % of the estimated price of schedule A.

36. Comparison of Bids

36.1 The Employer shall compare all substantially responsive bids to determine the lowest evaluated bid, in accordance with ITB 34 and 35.

37. Employer's Right to Accept Any Bid, and to Reject Any or All Bids

37.1 The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

F. Award of Contract

38. Award Criteria

38.1 The Employer shall award the Contract to the Bidder whose bid is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily and whose offer has been determined to be the lowest evaluated subject to ITB 38.2 and 38.3 below. In case of more than one bids are evaluated to be lowest, Contract shall be awarded to the bidder having higher average annual construction turnover (calculated as total certified payments received for contracts in progress or completed) in equivalent INR within the last three financial years.

38.2 The works contracts are not divisible in nature. Hence, following procedure shall be followed for award of the contract:

i. Among all qualified bidders, the lowest bidder will be termed L1. If L1 is 'Class-I local bidder', the contract will be awarded to L1.

ii. If L1 is not 'Class-I local bidder', the lowest bidder among the 'Class-I local bidder', will be invited to match the L1 price subject to Class-I local bidder's price falling within Margin of Purchase Preference (MPP) and the contact shall be awarded to 'Class-I local bidder' subject to matching the price of L1.

iii. In case such lowest eligible 'Class-I local bidder' fails to match the price of L1, the 'Class-I local bidder' with next higher bid within MPP shall be invited to match the price of L1 and so on, and contract shall be awarded accordingly.

iv. In case none of the 'Class-I local bidder' within MPP matches the L1 price, the contract will be awarded to L1 bidder.

38.3 The Employer has the right to review at any time prior to award of contract that the qualification criteria as specified in Section 3: Evaluation and Qualification Criteria are still being met by the

Bidder whose offer has been determined to be the lowest evaluated Bid. A Bid shall be rejected if the qualification criteria as specified in Section 3: Evaluation and Qualification Criteria are no longer met by the Bidder whose offer has been determined to be the lowest evaluated Bid. In this event the Employer shall proceed to the next lowest evaluated Bid to make a similar reassessment of that Bidder's capabilities to perform satisfactorily."

The Employer shall award the Contract to the Bidder whose bid is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily and whose offer has been determined to be the lowest evaluated subject to ITB 38.2 below. In case of more than one bids are evaluated to be lowest, Contract shall be awarded to the bidder having higher average annual construction turnover (calculated as total certified payments received for contracts in progress or completed) in equivalent INR within the last three financial years.

39. Notification of Award

39.1 Prior to the expiration of the period of bid validity, the Employer shall notify the successful Bidder, in writing, that its bid has been accepted by the Competent Authority at RVNL's Corporate Office at Delhi or CPM's Office. The notification letter (hereinafter and in the Conditions of Contract and Contract Forms called the "Letter of Acceptance") shall specify the sum that the Employer will pay the Contractor in consideration of the execution and completion of the Works (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price") and the requirement for the Contractor to remedy any defects therein as prescribed by the Contract.

39.2 Until a formal contract is prepared and executed, the notification of award shall constitute a binding Contract.

40. Signing of Contract

40.1 Promptly after notification, the Employer shall send the successful Bidder the Contract Agreement.

40.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.

41. Performance Security

41.1 Within twenty-eight (28) days of the receipt of notification of award from the Employer, the successful Bidder shall furnish the performance security in accordance with the conditions of contract, subject to ITB 35.5, using for that purpose the Performance Security Form included in Section 8: Contract Forms, or another form acceptable to the Employer.

In case the contractor fails to submit Performance Security within 28 days of issue of LOA, it may seek extension of time for a period not exceeding 28 days along with payment of damages either through bank transfer or Demand Draft in favour of RVNL. The rate of payment of damages for such extended period shall be a sum calculated @ 0.035% of the Performance Security for each day of the extension sought. Further, if the last day of the extension sought happens to be a declared holiday in the concerned office, submission of Performance Guarantee shall be accepted on the next working day. Extension of time may be granted by the authority who is competent to sign the contract agreement.

The contractor may commence the work within 42 days of issue of LOA subject to the condition that, no payment will be made to the contractor till completion of the following: -
1. Submission of Enforceable Performance Guarantee
2. Signing of Contract agreement.

In case contract is terminated on account of non-submission of Performance Security within the specified time or extended time, the Employer shall be entitled to forfeit Bid Security, damages paid if any, and other dues payable against that contract.

41.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or to sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security.

41.3 The above provision shall not apply to the furnishing of a Domestic Preference Security, if so required.

42. Jurisdiction of Courts

The bidding process shall be governed by and construed in accordance with the laws of India and the Courts as indicated in Bid Data Sheet shall have exclusive jurisdiction over all the disputes/issues arising under, pursuant to and/ or in connection with the bidding process.

43. Make In India

43.1 The provisions of revised 'Public Procurement (Preference to Make in India) Order 2017' issued by Department of Industrial Policy and Promotion under Ministry of Commerce and Industry vide letter no. P-45021/2/2017-PP (BE-II) dated 16.09.2020, as amended from time to time up to 28 days prior to deadline for submission of bids, shall be applicable to the bidding process and award of the contract shall be done accordingly.

43.2 **Local Content**: The amount of value added in India, which unless otherwise prescribed by Railway Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus value

of imported content in the item (including all custom duties) as proportion of total value, in percent. Services such as transportation, insurance, installation, commissioning, training, and after sales services like AMC / CMC etc. are not local value addition for an imported product.

44. Special Provisions for Micro and Small Enterprises (MSEs)

Provisions under this clause are applicable to the bidders registered as MSEs. In case JV is permitted as per the conditions of this document, both partners of proposed JV should be registered as MSE to avail benefits under this clause.

i. Applicants registered with the agencies (as mentioned in para iii) below) as micro or small enterprise (MSE) are exempted from the payment of RFP/bidding document fee.

ii. Applicants registered with the agencies (as mentioned in para iii) below) as micro or small enterprise (MSE) will be exempted from deposit of Proposal/Bid Security.

iii. MSE applicants will be eligible for Purchase Preference in case their proposal is considered to be substantially responsive and proposal price is within the Margin of Preference for MSEs as indicated in Contract Data.

iv. MSE applicants are required to enclose with their proposal;

a. The proof of their being micro or small enterprise (MSE) registered with any of the following agencies;
   - District Industries Centres
   - Khadi and Village Industries Commission
   - Khadi and Village Industries Board
   - Coir Board
   - National Small Industries Corporation
   - Directorate of Handicraft and Handloom
   - 'UdyogAadhaar' – The Online Portal of MSME
   - Any other body specified by Ministry of MSME.

b. Supporting document(s) indicating the terminal validity date of registration which should be a date after the deadline for submission of proposals.

Failing which, their proposals shall not be liable for consideration of benefits detailed in para (i), (ii) & (iii) above or as specified in the Bid Data Sheet.

***

Section 2

Bid Data Sheet (BDS)

[Section 2: Bid Data Sheet (BDS)]

This section consists of provisions that are specific to each procurement and supplement the information or requirements included in Section I – Instructions to Bidders.

A. Introduction

ITB 1.1	The number of the Invitation for Bids is: **RVNL/S&T/BPL/INDB-BNI/Pkg-1D (Indoor) Revised Date: 03/02/2026**
ITB 1.1	The Employer is: **RAIL VIKAS NIGAM LIMITED. NEW DELHI**
ITB 1.1	The name of the ICB is: **"Design, Supply, Installation, testing & commissioning of Indoor Signal and Telecommunication work from Mangliyagaon (Incl.) to Budni (Incl.) Section with provision of Electronic Interlocking in 14 stations viz Pannod, Semaliyachau, Chapda, Kheri, Hathnora, Deoli, Kannod, Khategaon, Pipaliya Nankar, Bapcha, Nasrullahganj, Salkanpur, Balkhera, Budni and alteration in existing interlocking system at Mangliyagaon station in connection with New Single Broad Guage Rail Line Between Indore to Budni in the state of Madhya Pradesh, India".**
ITB 4.1(b)(i)	NO JV
ITB 4.1 c	Shall not be applicable being a Domestic Bidding.
ITB 4.1 d	Shall not be applicable being a Domestic Bidding.
ITB 4.1 e	e Bidder for this work is Class-I Local

B. Bidding Documents

ITB 7.1	For clarification purposes only, the Employer's address is Senior Advisor S&T Rail Vikas Nigam Limited 174/2, Shakti Nagar, Opposite Alkapuri Gate No.1 Habibganj, Bhopal - 462024 E-mail: rvnlbplsnt@gmail.com For any help, please refer ""Learning centre under E-Tender: Works , 1. "Instructions to Contractors"" containing the detailed guidelines for E-Tendering available on www.ireps.gov.in and on Helpdesk of IREPS: 011-23761525
ITB 7.4	A pre bid meeting take place at the following date, time and place: Date: 17/02/2026

	Time: 11:30 hrs **Place: Rail Vikas Nigam limited Office, Bhopal at 174/2, Shakti Nagar, Opposite Alkapuri Gate No.1, Habibganj, Bhopal 462024 India.** **Through Physical/video conference. The prospective bidders who wish to attend the meeting shall submit a maximum of 2 email ids of the persons nominated to attend the meeting to the person nominated to contact atleast 2 working days before the pre bid meeting.** Site visit is not proposed to be organized by the employer. However, the bidders advised to visit the site before pre bid meeting.

C. Preparation of Bids

ITB 10.1	The language of the bid is: **English**
ITB 11.2	Alternative technical solutions **are not** permitted.
ITB 11.4 (f)	Checklist as per Form No. 2 given in Section 4: Bidding Forms
ITB 13.1	Alternative bids **will not be** permitted.
ITB 13.2	Alternative times for completion **will not be** permitted.
ITB 14.5	**The prices quoted by the Bidder shall be adjustable in accordance with the provisions in Sub Clause 13.8 of GCC, Section 7, Part B; Particular Conditions of Contract.**
ITB 15.1	The unit rates and the prices shall be quoted by the bidder entirely in **Indian Rupees (INR)**
ITB 18.1	The bid validity period shall be 120 **(One hundred and twenty only)** days.
ITB 19.1	The Bidder should submit along with the bid, a bid security for ₹ 91.34 Lakh only. OR In case of MSEs they should upload the scanned copy of their registration in

	place of scanned copy of bank Guarantee
ITB 19.3	The bid security shall be valid up to 26/08/2026. This is not applicable for MSEs.
ITB 20.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: (a) In case of Companies, a POA from the Director of the Company who has been authorized by the Board of Directors through resolution to sign on behalf of the Company (b) In case of firms Power of Attorney by the Proprietors. (c) ~~In case of JV POA by the JV partners.~~

D. Submission and Opening of Bids

ITB 22.1	For bid submission purposes e-Tendering website address is: www.ireps.gov.in The deadline for bid submission is: Date: 17/03/2026. Time: 11:00 hrs.
ITB 25.1	The online bid opening shall take place at e tendering portal www.ireps.gov.in **Bid Opening**: Date: 17/03/2026. Time: 11:30 hrs.
ITB 34.1	The Margin of Purchase Preference is 20%.
ITB 38.1	"The Employer shall award the Contract to the Bidder whose bid is substantially responsive to the Bidding Document, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily and whose offer has been determined to be the lowest evaluated subject to ITB 38.2 and ITB 43 below. In case of more than one bids are evaluated to be lowest, Contract shall be awarded to the bidder having higher average annual construction turnover (calculated as total certified payments received for contracts in progress or completed) in equivalent INR within the last three financial years."
ITB 42	Bhopal
ITB 44	Purchase preference for MSEs is not applicable.

Section 3

Evaluation & Qualification Criteria (EQC)

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1. Evaluation

In addition to the criteria listed in ITB 35.2 (a)-(e), the following criteria shall apply:

1.1. Adequacy of Technical Bid

Evaluation of the Bidder's commitment to mobilize key equipment and personnel for the contract consistent with the requirements stipulated in Section 5: Works Requirements regarding work methods, scheduling, and material sourcing.

1.2. Multiple Contracts

Multiple Contracts are not envisaged.

1.3. Completion Time

Alternative Completion Time is not permitted.

1.4. Technical Alternatives

Technical alternatives are not permitted

1.5. Margin of Preference

1.5.1. Purchase Preference to Central Public Sector Enterprises (CPSEs)

Purchase Perference to CPSEs shall not apply.

1.5.2. Preference to Make in India

Preference as defined in ITB clause 43 shall be applicable.

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2. Qualification

2.1 Eligibility

Criteria	Compliance Requirements Single Entity	Documents Submission Requirements
2.1.1 Conflict of Interest		
No Conflict of interest in accordance with ITB Sub-Clause 4.3.	Must meet requirement	Letter of Technical Bid (Form PS 1)
2.1.2 Share of partners		
The share of partners shall not be less than the specified percentage.	N.A.	N.A.
2.1.3 Disqualification of Bidder		
Not Disqualified under Clause 4.4 of ITB.	Must Meet Requirement	Letter of Technical Bid (Form PS 1) & Affidavit (Form PS 3)

2.2 Financial Status

Requirement	Single Entity	Documents Submission Requirements
2.2.1 Historical Financial Performance		
Submission of audited balance sheets for the last five financial years (refer note below the table) to demonstrate the current soundness of the Bidders financial position. As a minimum criterion, Profit Before Tax (PBT) should be positive for two financial years out of last five financial years.	Must meet requirement	Form FIN-1 with attachment
2.2.2 Average Annual Construction Turnover		
Minimum average annual construction turnover **Rs. 30.45 Crore** in equivalent **INR** 2V/T Crores (Where V= value of work. T=Time of completion in Years) Calculated as total certified payments received for	Must meet requirement	Form FIN-2

contracts in progress or completed, within the last **three** financial years (refer note below the table).		
2.2.3 Net-Worth		
Minimum average Net-Worth (Total Assets – Total Liabilities) should not be less than **Rs. 9.13 Crore INR** *0.2V* **Crores** *(Where V= value of work.)* during the last three financial years (refer note below the table).	Must meet requirement	Form FIN-1
2.2.4 Bid Capacity		
Available Bid capacity = (A x N x 1.5 – 0.33 x N x B), should be more than the total Estimated price where, A = Maximum value of works executed in any one year during the last 5 years which will take into account the completed as well as works in progress (total contract receipts). B = Total value of existing commitments irrespective of the completion period of those works (in case bidder or partner of JV has existing commitment through another JV, then the commitment will be taken in proportion to the share of the Bidder in the JV) and N = Number of years prescribed for completion of works in the present bid.	Must meet requirement	Form FIN-2 & 3

Note: In the event that the audited accounts for the latest concluded Financial Year are not available, the Bidder shall furnish information pertaining to the last five financial years after ignoring the latest concluded financial year. In case, the bidder submits audited financial information for the last six or more years, only the figures for the latest five years shall be considered for evaluation.

2.3 Experience :

2.3.1 Specific Construction Experience		
Criteria	**Compliance Requirements** **Single Entity**	**Documents Submission Require-ments**
2.3.1 (a) Contracts of Similar Size and Nature.		
(I) Execution as contractor, or subcontractor, at least One contract that has been successfully or is substantially completed within the last Seven years before the deadline for submission of the bids, and that is similar to the proposed work. The similar work here shall be that which includes at least any one of the quantities of key activities mentioned below: **(Work requirement assessed is = 3 stations)** i. Installation, testing and commissioning of EI/SSI/PI/RRI works of at least ***(0.35Q)*** stations *(where Q= total number of stations in work requirement)* in railway through single contract. (Note: Total number of stations for *work requirement (Q) /* bidders' experience shall be calculated as under: a) For new EI/PI/SSI/RRI works *to be commissioned in the work/*commissioned: - 1 x number of stations involving indoor and outdoor signaling works + 0.5 number of stations involving only outdoor signaling works + 0.5 number of stations involving only indoor signaling works. b) For modification works of existing EI/PI/RRI/MACLS with end cabin Lever frames installations *to be commissioned in the work/*commissioned to	must meet requirement of either (I) or (II)	Form EXP - 2(a)

suit Railway Electrification works: 0.5 x number of stations involving RE modification signaling works. c) For new Automatic Signalling works *to be commissioned in the work*/ commissioned:- 0.1 x Number of Automatic Signals (excluding Advance Starter, Starter and Home Signals of the Station) c) No other alteration/ modification work shall be considered.) **OR** (II) Execution as contractor, or subcontractor, at least Two contracts, each that have been successfully or are substantially completed within the last Seven years before the deadline for the submission of the bids, and that are similar to the proposed work. Each similar work here shall be that which includes at least any one of the quantities of key activities mentioned below: **(Work requirement assessed is = 2.0 stations) each contract.** i. Installation testing and commissioning of EI/SSI/PI/RRI works of at least ***(0.2Q)*** stations *(where Q= total qty of Stations in work requirement)* in railway through each contract. (Note: Total number of stations for *work requirement (Q) /* bidders' experience shall be calculated as under: a)For new EI/PI/SSI/RRI works *to be commissioned/* commissioned: - 1 x number of stations involving		

indoor and outdoor signalling works + 0.5 number of stations involving only outdoor signalling works + 0.5 number of stations involving only indoor signalling works. b) For modification works of existing EI/PI/RRI/MACLS with end cabin Lever frames installations *to be commissioned/*commissioned to suit Railway Electrification works: - 0.5 x number of stations involving RE modification signalling works c) For new Automatic Signaling works *to be commissioned in the work/* commissioned: - 0.1 x Number of Automatic Signals (excluding Advance Starter, Starter and Home Signals of the Station) d) No other alteration/ modification work shall be considered.)		
2.3.1 b) Construction Experience in Key Activities (Executed during the last Seven years prior to the applications submission deadline)		
For the contracts as per 2.3.1 (a) above and/or other contracts a minimum construction experience in the following key activities: **(Work requirement assessed is = 06 stations)** i. Commissioning (after Installation and testing) of EI/SSI/PI/RRI works of at least ***(0.7Q)*** stations *(where Q= total quantity of Stations in work requirement)* in railway in one year (as calculated as per note 6 below). *(Note: Total number of stations for work requirement (Q) shall be calculated as under:* *a)For new EI/PI/SSI/RRI works to be commissioned for the work: -* *1 x number of stations involving indoor and outdoor signaling*	Must meet all requirement	Form Exp. 2(b)

works + 0.5 number of stations involving only outdoor signaling works + 0.5 number of stations involving only indoor signaling works. *b) For modification works of existing EI/PI/RRI/MACLS with end cabin Lever frames installations to be commissioned for the work to suit Railway Electrification works: -* *0.5 x number of stations involving RE modification signaling works* *c)* For new Automatic Signalling works *to be commissioned in the work/* commissioned:- 0.1 x Number of Automatic Signals (excluding Advance Starter, Starter and Home Signals of the Station) *d) No other alteration/modification work shall be considered.)*		

Note:-

(1) (a) For the purpose of value of work for the past experience of a firm in a JV in sub clause 2.3.1(a) credit shall be given in proportion of the percentage share of the firm in that JV. For past experience of key activities in sub clause 2.3.1(a) & (b) credit shall be given for execution of the quantity of that specific activity executed by the firm as part of a JV, duly certified by the Employer. If the Employer's Certificate does not indicate the specific quantity of key activity/activities executed by each partner, in such a case credit for quantity of each key activity shall be given as per following provisions in order of priority:

i) As per details given in JV agreement forming part of the relevant Contract Agreement.

ii) If JV agreement does not provide such details, then credit shall be given in proportion of the percentage share of the firm in that JV.

(b) In case a JV quoting for the tender has executed similar work specified in 2.3.1(a) and construction experience in key activities specified under 2.3.1(b), with the same constitution of JV, the requirement specified to be met under sub clause 2.3.1(a) & (b) shall be considered to have been met treating the JV as a single entity for this purpose.

(2) The bidder must submit, after the award of the contract, MOU with the RDSO approved source covering supply of Equipment for EI, Installation, Testing and Commissioning of EI by the RDSO approved source including after sales support during the Warranty period.

After award of the contract and MOU of Bidder wit OEM, RDSO approved source (OEM or its RDSO approved source of EI) cannot be changed unless:

a. OEM or its RDSO approved source of EI is removed from the approved list of RDSO suppliers.
b. Any other compelling reason/exigencies which require change of OEM or its RDSO approved source of EI after approval of the Accepting Authority of the Contract.

RB letter no 2013/Sig/01/pt/ DUP dated 17.02.2022.

(This shall not be applicable in case Indoor Signalling is not part of the tender)

(3) For Sub-clause 2.2.2 Average Annual Construction Turnover, the Bidder should submit actual construction turnover figures for the specified financial years. For Evaluation purposes the figures of previous years shall be updated @ 5% per year compounded annually based on Rupee value to bring them to the level of the last Financial Year specified in sub-clause. If the figure for turnover in an individual year is in a currency other than INR, then the same shall first be converted to INR based on the exchange rates published by Reserve Bank of India/International Monetary Fund (in that order) as on last day of that year and then the figures in INR shall be updated as mentioned above.

(4) For Sub-clause 2.3.1 Specific Construction Experience, the Bidder should submit actual Value of Work completed/ substantially completed. Value of Work for Evaluation purposes shall be updated based on Rupee value to bring them to the price level of date of deadline for submission of bids as per formula given below:-

A = B [1+ (5÷36500) x N]
Where
A = updated value of work on dead line for submission of bids.
B = value of work on the date of completion/substantial completion as indicated in the Employer's certificate.
N = Number of days between date of completion and dead line for submission of bids.
The base date for updating purpose shall be considered as the date of completion of work as certified by the Engineer-in Charge.
In case value of the work is mentioned in a currency other than INR, then the same shall first be converted to INR based on the exchange rates published by Reserve Bank of India/International Monetary Fund (in that order) as on the date of completion/substantial completion of the work and then the figures in INR shall be updated as mentioned above.

(5) The phrase "substantial completion" used in clause 2.3.1 (a) shall mean where the employer has certified:
Ongoing works where required value of the work as well as required quantity of key activity has been physically completed. The same should be supported by Employer's certificate.

(6) Evaluation of item 2.3.1(b) shall be done to assess the execution of quantity of each activity in a period of any one year. In cases, where year-wise quantities (For identical Period) of a particular key activity are indicated in the employer's certificate(s) of single or multiple works, the same will be considered to arrive at the total quantity of the particular key activity executed in a single year through single/multiple contract (except for OHE and Transmission Line key activities where year wise quantity mentioned by employer will not be considered and calculation shall always be made as per sub-paras below). In all other cases, assessment of execution of quantity of the key activity in a period of any one year will be made in the following manner:

(i) If the criteria is being met through a single contract (as per statement submitted by the bidder as required vide Para (vi) below), then the quantity executed shall be divided by the number of months from start of execution of activity up to the end of execution of activity and multiplied by 12 to arrive at the quantity executed in a year (if the period of execution is less than 12 months, the same will be taken as 12 months for calculation purpose) to establish whether the criteria is being met.

(ii) If the criteria is being met through multiple contracts (as per statement submitted by the bidder as required vide Para (vi) below), then the quantities executed through these contracts will be added and the sum shall be divided by number of months for the period starting from earliest month of start of execution of the activity in any of the contracts and ending with the latest month of execution of the activity in any of the contracts, as per employer's certification. In case the period between the earliest start month and latest finish month is less than 12 months, it will be taken as 12 months for calculation purposes. This average will then be multiplied by 12 to arrive at quantity executed in a year to establish whether the criteria is being met.

~~(iii) In case employer's certificate does not indicate start/end month of execution of the key activity then start/end month of contract shall be considered as the start/end month of execution of the key activity except for OHE or transmission line key activity which shall be as under:~~

~~For OHE key activity, the date of start will be the date of issue of LOA. However, if the employer certifies that any delay in start of the project was beyond the control of the contractor, actual date of start of OHE structure foundation, as certified by the Employer, will be considered as the date of start of OHE activity. For Transmission Line key activity, date of issue of LOA will be considered as the date of start of activity.~~

~~The date of latest charging of OHE at 2.2 KV/ 25 KV or above, as certified by the Employer, for the quantity charged by the bidder in Form Exp-2(b) will be considered as the end date of OHE activity for that particular work. For Transmission Line key activity the end date will be the date of commissioning of Transmission Line.~~

(iv) For S&T activity, the number of stations commissioned (after installation and testing) of EI/SSI/PI/RRI within one year shall be counted as under:

a) For new EI/PI/SSI/RRI works commissioned: -

1 x number of stations involving indoor and outdoor signaling works + 0.5 number of stations involving only outdoor signaling works + 0.5 number of stations involving only indoor signaling works.

b) For modification works of existing EI/PI/RRI/MACLS with end cabin Lever frames installations commissioned to suit Railway Electrification works: -

0.5 x number of stations involving RE modification signaling works

c) For new Automatic Signalling works commissioned:-

0.1 x Number of Automatic Signals (excluding Advance Starter, Starter and Home Signals of the Station)

d) No other alteration/ modification work shall be considered.

(v) For the contracts starting more than seven years prior to the deadline for submission of bids and where employer's certificate does not clearly indicate quantity of a particular key activity executed during last seven years prior to the deadline for the submission of bids, in such a case, quantity considered to be executed during the period of the such contract falling within last seven years shall be worked out on proportionate basis [i.e. by applying ratio of period of contract falling in last seven years to total period of the contract or period of execution of key activity falling in last seven years to total period of execution of the key activity as given in employer's certificate as the case may be]. Provisions of note (i) above shall also apply to cases where period falling within last seven years is less than 12 months.

(vi) **Bidder should submit a statement indicating as to how criteria specified under item 2.3.1(b) is being met duly referring to the relevant employer's certificates enclosed with the bid.**

(7) Deleted.

(8) The experience of ~~track linking, OHE and~~ EI/SSI/PI/RRI work that shall be considered under this qualifying criteria must be a work of Railway including Metro Railway system but excluding LRT, Tramway & Mono Rail.

(9) ~~Overhead Equipment works that shall be considered under this qualifying criterion must include erection, testing and charging of 25 kV and above OHE system charged at 2.2 KV/25 KV or above as certified by the employer for electrification of un-electrified track. Works pertaining to construction of switching stations, commissioning of capacitor banks for Railway Electrification projects, rehabilitation of OHE/Structures, shall not qualify as similar works. In case of double circuit transmission/distribution lines, equivalent CKM will be twice of double circuit length~~.

2.4 **Personnel**

The Bidder must give an undertaking to provide at least the personnel for the key position as given in Section 5: Works Requirement, if he is awarded the contract:

2.5 **Equipment**

The Bidder must give an undertaking to provide at least the key equipment for execution of the work as given in section5: Works Requirement, if he is awarded the contract:

2.6 Specialist sub-contractor: DELETED

IMPORTANT NOTE FOR SPECIAL ATTENTION OF BIDDERS:

EACH BIDDER SHOULD SUBMIT DETAILS/REFERENCES AS TO HOW THE ELIGILIBILITY CRITERIA IS BEING MET BY THE BIDDER AGAINST EACH ITEM OF EQC. THIS SHOULD BE PREPARED AND SUBMITTED IN THE PERFORMA "EQC FORM NO.1" ENCLOSED IN SECTION 4.

Section 4

Bidding Forms

Section 4: Bidding Forms

This Section contains the forms which are to be completed by the Bidder and submitted as part of his Bid

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Form: PS 1

Letter of Technical Bid

Date: .....

Invitation for Bid No.: .....

To: .....

We, the undersigned, declare that:

(a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) 8;

(b) We offer to execute the Works in conformity with the Bidding Documents;

(c) Our bid shall be valid for a period of.....days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

(d) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents;

(e) If our bid is accepted, we commit to deploy key equipment and key personnel consistent with the requirements stipulated in Section 5: Works Requirements;

(f) If our bid is accepted, we commit to submit work method statements for all major activities and get these approved from the engineer prior to commencing work on such activities. We also understand that the work shall be executed as per the approved method statements without any deviations;

(g) We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB 4.3;

(h) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB 4.3, other than alternative offers submitted in accordance with ITB 13;

(i) We have read the clause regarding restrictions on procurement from a bidder of a country which share a land border {Details in clause ITB 4.1 (d)} with India. We certify that:

@ This bidder is not from such a country OR

This bidder is from such a country and the bidder has been registered with the Competent Authority.

We hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered

[@ Strike out whichever is not applicable. In case the bidder is from a country which share a land border with India , evidence of valid registration by the Competent Authority shall be attached]

(j) If our bid is accepted, we will not sub-contract any work to a contractor from a bidder of a country which share a land border {Details in clause ITB 4.1 (d)} with India unless such contractor is registered with the Competent Authority.

(k) i. We declare that we are not liable to be disqualified in Accordance with ITB 4.4, and we are enclosing the affidavit for the same as per the Performa given in the bid document.

ii. We understand that if at the time of evaluation of the bid or during execution of the contract, the declaration regarding local content, submitted thorough the relevant form provided in Section 4 Bidding Forms, is found to be false, it will be treated as breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which the Bidder or its successors can be debarred up to two years along with such other actions as may be permitted by law.

iii. We have also enclosed declaration in Form-MII and also a certificate, in case the estimated cost of the work is more than ₹10 Cr, from statutory auditor or cost auditor of the company or from practicing cost accountant or chartered accountant.

iv. We also undertake that the 'Local Content' added in the entire work will have to be submitted along with the final bill.

(l) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and

(m) We have not made any deviations from the requirement of the bidding document and we have also not made any tampering or changes in the bidding documents on which the bid is being submitted and if any tampering or changes are detected at any stage, we understand the bid will invite summary rejection and forfeiture of bid security/the contract will be liable to be terminated along with forfeiture of performance security, even if LOA has been issued.

(n) If our bid is accepted, we opt to take payment into the bank account, nominated by us.

Or

If our bid is accepted, we opt to take payment through Letter of Credit(LC) arrangement as per GCC clause 14.7.1 and we hereby affirm having read over and agreed to the terms and conditions of the LC option. We also understand that the option of taking payment through LC arrangement, shall be final and no change shall be permitted, thereafter, during execution of contract.

[Delete whichever is not applicable. In case the bidder fails to delete one of the two options above, the option of payment into the bank account, nominated by the contractor shall prevail]

(o) We declare that the submission of this bid confirms that no agent, middleman or any intermediary has been, or will be engaged to provide any services or any other item of work related to the award and performance of this contract. We further confirm and declare that no agency commission or any payment which may be construed as an agency commission has been, or will be, paid and that the bid price does not include any such amount. We acknowledge the right of the Employer, if he finds to the contrary, to declare our bid to be noncompliant and if the contract has been awarded to declare the contract null and void

(p) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

(q) We are aware about the requirement of Mandatory on-boarding of MSME Vendors of CPSE's on TReDS portal as per the directives of Department of Public Enterprises through office memorandum no. DPE-7(4)/2007-Fin Dated 4th May 2020. We declare that *we will / we are already* [***select correct option***] on-board with TreDS portal ofM/s Invoicemart, A.TreDS Ltd.,A3, 11th floor, Ashar IT Park, Thane (W), Mumbai-400604 TReDS Portal.Customer care no. 022- 62357373; email id-customer.care@invoicemart.com; Anoop Mishra Mobile no.- 9667554766; email id-anoop5.mishra@invoicemart.com.

OR

We are not MSME. [***Select correct option***]

Name .....

In the capacity of .....

Signed .....

Duly authorized to sign the Bid for and on behalf of .....

Date .....

Form: PS 2

Letter of Price Bid

Date: .....

Invitation for Bid No.: .....

To:.....

We, the undersigned, declare that:

(a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB) 8;

(b) We offer to execute the Work in conformity with the Bidding Documents;

(c) The total price of our Bid is indicated in the **Summary Sheet of Bill of Quantities**,

(d) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and

(e) We have not made any deviations from the requirement of the bidding document and we have also not made any tampering or changes in the bidding documents on which the bid is being submitted and if any tampering or changes are detected at any stage, we understand the bid will invite summary rejection and forfeiture of bid security/the contract will be liable to be terminated along with forfeiture of performance security, even if LOA has been issued.

(f) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Name .....

In the capacity of .....

Signed .....

Duly authorized to sign the Bid for and on behalf of .....

Date .....

Form: PS 3

FORMAT FOR AFFIDAVIT TO BE SUBMITTED BY BIDDER ALONGWITH THE BID

*(To be executed in presence of Public Notary on non-judicial stamp paper of the appropriate value in accordance with relevant stamp Act. The stamp paper has to be in the name of the bidder)***

I **…….** ***(Name and designation)*******…….** appointed as the attorney/authorized signatory of the bidder (including its constituents), M/s. _____ (hereinafter called the bidder) for the purpose of the Bid for the work of _____as per the bid No._____of RVNL, do hereby solemnly affirm and state on behalf of the bidder including its constituents as under:

*1. That the bidder or any of its constituents has not been Blacklisted/ banned for business dealings for all Government Departments or by Ministry of Railways or by RVNL at any time and/or no such blacklisting is in force as on the deadline for submission of bids.

*2. That none of the previous contracts of the bidder or any of its constituents had been terminated/rescinded for Contractor's failure or part terminated for its failure as a JV partner with forfeiture of its full Performance Security, by Rail Vikas Nigam Ltd. during the period of last 3 years before the deadline for submission of bids.

(Add Proviso of Clause 4.4(b) (ITB) suitably, if any Contract was so terminated).

*3. The bidder or any of its constituents has not been imposed liquidated damages of 5% or more of contract value by RVNL due to delay in the implementation of any previous contract (either in the capacity of a single entity or as constituent of any other JV) within the period of last 2 years before the deadline for submission of bid [*2 years shall be reckoned from the date on which imposed L.D. has exceeded 5% of the contract price]*and there are no such accrued delay damages which has not been fully recovered before the deadline for submission of bids on account of contractor's request for deferring recovery to maintain cash

flow and RVNL has acceded to the same in the interest of the project and the work under the previous contract in question has been completed before the deadline for submission of bid, unless imposition of such delay damages has been set aside by the Competent Authority.

*4 That the Bidder or any of its constituents is neither Bankrupt/Insolvent nor is in the process of winding-up nor such a case is pending before any Court on the deadline of submission of the bid.

*5. That the name of the Bidder or any of its constituents is not on the list of "Poor Performer" of RVNL as on the deadline for submission of bid.

6. We declare that the bidder or any of its constituents have not either changed their name or created a new business entity as covered by the definition of "Allied Firm" under para 1102 (iii) of chapter XI of Vigilance manual of Indian Railways with latest amendments and corrections (available on website of Indian Railways), consequent to having been banned business dealings for specified period which is not over or suspended business dealings or having been declared as poor performer.

7.# We declare and certify that balance sheets for last three financial years including that for the latest concluded financial year are being submitted.

OR

We declare and certify that balance sheet for the latest concluded financial year has not been finalized till date and that is why we are furnishing financial data for last three financial years ignoring the latest concluded financial year.

*(# - Delete whichever is not applicable)***.

8. That the bidder or any of its constituents is not an Entity of such countries, which have been identified by the Railway Ministry as not allowing Indian Companies to participate in their Government procurements for any item related to Railway Ministry, except for the list of items published by the Railway Ministry permitting their participation.

9. That the bidder or any of its constituents has not committed any previous transgressions in respect of Code of Integrity [Rule 175 (1) of General Financial Rules 2017] with any entity in any country during the last three years or of being debarred by any other procuring entity.

10. We declare and certify that we have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.

11. We declare that the information and documents submitted along with the tender by us are correct and we are fully responsible for the correctness of the information and documents, submitted by us.

12. "We have read the clause regarding restrictions on procurement from a bidder of a country which share a land border with India and I certify that:

@ This Bidder is not from such a country

OR

This Bidder is from such a country and the bidder has been registered with the Competent Authority

13. We understand that in case we cease to fulfill the requirements of qualifying and eligibility criteria at any time after opening of bids and till finalization of bids, it will be our bounden duty to inform the Employer of our changed status immediately and in case of our failure to do so, our bid shall be rejected and bid security shall be forfeited. In case such failure comes to the notice of Employer at any time after award of the contract, it will lead to termination of the contract and forfeiture of Bid or Performance Security. We shall also be liable for Banning of Business dealings up-to a period of five years.

14. We understand that if the contents of the affidavit are found to be false at any stage during bid evaluation, it will lead to rejection ofour bid and forfeiture of the bid security. Further, we ***[insert name of the bidder]***** _____ and all our constituents understand that we shall be liable for banning of business dealings up-to a period of five years.

15. We also understand that if the contents of the affidavit are found to be false at any time after the award of the contract it will lead to

termination of the contract, forfeiture of Bid or Performance Security and Banning of Business dealings of the Bidder and all its constituents for a period of upto five years

SEAL AND SIGNATURE OF THE BIDDER

Verification:

Verified on _____day of ____at _____that the contents of the above mentioned affidavit are true and correct and nothing material has been concealed there from.

SEAL AND SIGNATURE OF THE BIDDER

**Modify the contents wherever necessary, in terms of sub-clause 4.4 ITB.*
*** The contents in Italics are only for guidance purpose and details as appropriate, are to be filled in suitably by Bidder.*

Attestation before Magistrate/Public Notary

@ Strike out whichever is not applicable. In case the bidder is from a country which share a land border with India, evidence of valid registration by the Competent Authority shall be attached.

Form: PS 4

DELETED

Form: PC/1

Schedules

Schedule of Payment Currencies

(Refer Sub Clause 14.15)

DELETED

Form: BDF/1

Bid Security

Bank Guarantee

(On non-judicial stamp paper of the appropriate value in accordance with Stamp Act. The stamp paper should be in the name of the Executing Bank).

From:

.....[***Insert Bank's Name, and Address of Issuing Branch or Office]*** **.....**

To:

The Chairman and Managing Director,
Rail Vikas Nigam Limited, World Trade Center, Tower A 6th to 9th floor, Nauroji Nagar
New Delhi-110 029

Beneficiary: Rail Vikas Nigam Limited (hereinafter called "the Employer")

Date:.....

Bid Security No.: .....

We have been informed that . . . . . *[***Insert** ***name of the Bidder]***..... (hereinafter called "the Bidder") intends to submit to you its bid (hereinafter called "the Bid") for the execution of . . . . . [***name of contract***]. . . . . under Invitation for Bids No. . . . . .dated..... ("the IFB").

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

AND

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

1. KNOW ALL MEN that by these present that I/We the undersigned ***[Insert name(s) of authorized representatives of the Bank],*** being fully authorized to sign and incur obligations for and on behalf of the Bank**,** confirm that the Bank, hereby, unconditionally and irrevocably guarantee to pay to the Employer full amount in the sum of ***[Insert Value of Bid Security required]*** as above stated.

2. The Bank undertakes to immediately pay on presentation of demand by the Employer any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the Employer on the Bank shall be final, conclusive and binding, absolute and unequivocal on the Bank notwithstanding any disputes raised/ pending before any Court,

Tribunal, Arbitration or any Authority or any threatened litigation by the Bidder or Bank.

3. The Bank shall pay the amount as demanded immediately on presentation of the demand by Employer without any reference to the Bidder and without the Employer 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 Employer 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 Employer at any time.

6. This guarantee will remain valid and effective from***…….……..[insert date of issue]*** till ……..***[insert date, which should be minimum 42 days beyond the expiry of bid validity date in the IFB]***. Any demand in respect of this Guarantee should reach the Bank within the validity period of Bid Security.

7. The Bank Guarantee is unconditional and irrevocable.

8. The expressions Bank and Employer 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 Employer. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No.758.

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

Date ……
Place…….

……
Bank's Seal and authorized signature(s)
[Name in Block letters] ……..
[Designation]……..……
[P/Attorney] No.

Witness:

1 Signature
Name & Address & Seal

2 Signature Bank's Seal
Name & address & 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.

Form : BDF/2

Bid Security Declaration Form

DELETED

Surety Bond for BID Security

(Refer Clauses - Para 4 of Preamble, Clause 19 of ITB, and Clause 4.2 of GCC)

Surety Bond No. Dated: - -

In consideration of you, RAIL VIKAS NIGAM LIMITED (RVNL), having its Corporate office at World Trade Center, Tower A 6th to 9th floor, Nauroji Nagar New Delhi-110 029

1.--, India which is a Public Sector Enterprise set up as a wholly owned Government Company under the provisions of Section 617 of Companies Act., (hereinafter referred to as the"**Authority**", which expression shall unless it be repugnant to the subject or context thereof include its successors and assigns) having agreed to receive the Bid of ----------(a Company registered under Companies Act,1956/2013) and having its registered office at_____----------
(hereinafter referred to as the "Bidder"which expression shall unless it be repugnant to the subject or context thereof include its/their executers, administrators, successors and assigns), for the _____, (hereinafter referred to as "the Project") pursuant to the RFP document dated ---------- issued in respect of the Project and other related documents including without limitation the Draft contract agreement (hereinafter collectively referred to as "Bidding Documents"), we, _____ (Name of the Insurance Company) having our registered office at _____and one of its branches at_____, (hereinafter referred to as the "Surety Insurer"), at the request of the bidder, do hereby in terms of Refer Clauses Para 4 of Preamble, Clause 19 of ITB, and Clause 4.2 of GCC of the RFP/Bid document, irrevocably, unconditionally and without reservation guarantee the due and faithful fulfilllment and compliance of the terms and conditions of the bidding documents (including the RFP /Bid document) by the said bidder and unconditionally and irrevocably undertake to pay forthwith to the Authority an amount of **Rs. _____ (Rupees_____Only)** (hereinafter referred to as the "Surety Bond") as our primary obligation without any demur, reservation, recourse, contest or protest and without reference to the bidder, if the bidder shall fail to fulfil or comply with all or any of the terms and conditions contained in the said bidding documents.

2. Any such written demand made by the Authority stating that the Bidder is in default of the due and faithful fulfillment and compliance with the terms and conditions contained in the Bidding Documents shall be final, conclusive and binding on the Surety Insurer.
3. We, the Surety Insurer, do hereby unconditionally undertake to pay the amount due and payable under this Surety Bond without any demur, reservation, recourse, contest or protest and without any reference to the Bidder or any other person and irrespective of whether the claim of the Authority is disputed by the Bidder or not, merely on the first demand from the Authority stating that the amount claimed is due to the Authority by reason of failure of the Bidder to fulfil and comply with the terms and conditions contained in the Bidding Document including failure of the said Bidder to keep its Bid open during the Bid validity period as set forth in the said Bidding Document for any reason whatsoever. Any such demand made on the Surety Insurer shall be conclusive as regards amount due and payable by the Surety Insurer under this Surety Bond. However, our liability under this Surety Bond shall be restricted to an amount not exceeding **Rs._____ (Rupees _____Only).**

4. This Surety Bond shall be irrevocable and remain in full force for a period of 150 (one hundred and fifty) days from the Bid Due Date and a claim period of 60 (sixty) days or for such extended period as may be mutually agreed between the Authority and the Bidder, and agreed to by the Surety Insurer, and shall continue to be enforceable till all amounts under this Surety Bond have been paid.

5. We, the Surety Insurer, further agree that the Authority shall be the sole judge to decide as to whether the Bidder is in default of due and faithful fulfillment and compliance with the terms and conditions contained in the Bidding Document including, inter alia, the failure of the Bidder to keep its Bid open during the Bid validity period set forth in the said Bidding Document, and the decision of the Authority that the Bidder is in default as aforesaid shall be final and binding on us, notwithstanding any differences between the Authority and the Bidder or any dispute pending before any Court, Tribunal, arbitrator or any other Authority.

6. The Surety Bond shall not be affected by any change in the constitution or winding up of the Bidder or the Surety Insurer or any absorption, merger or amalgamation of the Bidder or the Surety Insurer with any other person.

7. In order to givefull effect to this Surety Bond, the Authority shall be entitled to treat the Surety Insurer as the Principal Debtor. The Authority shall have the fullest liberty without affecting in any way the liability of the Surety Insurer under this Surety Bond from time to time to vary any of the terms and conditions contained in the said Bidding Document or to extend time for submission of the Bids or the Bid validity period or the period for conveying acceptance of Letter of Award by the Bidder or the period for fulfillment and compliance with all or any of the terms and conditions contained in the said Bidding Document by the said Bidder or to postpone for any time and from time to time any of the powers exercisable by it against the said Bidder and either to enforce or forbear from enforcing any of the terms and conditions contained in the said Bidding Document or the securities available to the Authority, and the Surety Insurer shall not be released from its liability under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the said Bidder or any other forbearance, act or omission on the part of the Authority or any indulgence by the Authority to the said Bidder or by any change in the constitution of the Authority or its absorption, merger or amalgamation with any other person or any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of releasing the Surety Insurer from its such liability.

8. Any notice by way of request, demand or otherwise hereunder shall be sufficiently given in writing or made if addressed to the Surety Insurer and sent by courier or by registered post or by certified e-mail to the Surety Insurer at the address or e-mail set forth herein.

9. We, the Surety Insurer undertakes to make the payment on receipt of Authority's notice of claim on us addressed to _____and delivered at our above branch who shall be deemed to have been duly authorized to receive the said notice of claim.

10. It shall not be necessary for the Authority to proceed against the said Bidder before proceeding against the Surety Insurer and the Surety Bond herein contained shall be enforceable against the Surety Insurer, notwithstanding any other security which the Authority may have obtained from the said Bidder or any other person and which shall, at the time when proceedings are taken against the Surety Insurer hereunder, be outstanding or unrealized.

11. We, the Surety Insurer, further undertake not to revoke this Surety Bond during its currency except with the previous express consent of the Authority in writing.

12. The Surety Insurer declares that it has power to issue this Surety Bond and discharge the obligations contemplated herein, the undersigned is duly authorized and has full power to execute this Surety Bond for and on behalf of the Surety Insurer.

13. For the avoidance of doubt, the Surety Insurer's liability under this Surety Bond shall be restricted to **Rs. _____(Rupees _____ Only)**. The Surety Insurer shall be liable to pay the said amount or any part thereof only if the Authority serves a written claim on the Surety Insurer in accordance with paragraph 9 hereof, on or before ---. .---.

14. This Surety Bond shall also be operatable at our _____branch at_____, from whom, confirmation regarding the issue of this Surety Bond or extension/renewal thereof shall be made available on demand. In the contingency of this Surety Bond being invoked and payment hereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.

15. The Insurance Surety Bond shall be verified from the specific portal created for this purpose.

Signed and Delivered by---------- General Insurance Company Limited

Signature of the Authorized Signatory
(Official seal)

_____General Insurance Company Limited is registered with IRDAI License No. _____

The stamp duty applicable for the policy as per Indian Stamp Act 1899 has been paid via e-stamping facility.

Form: JV/1

PRO-FORMA LETTER OF PARTICIPATION FROM EACH PARTNER OF JOINT VENTURE (JV)

(On each Firm's Letter Head)

DELETED

Form: JV/2

FORMAT FOR POWER OF ATTORNEY FOR AUTHORISED SIGNATORY OF JOINT VENTURE (JV) PARTNERS/SINGLE ENTITY

POWER OF ATTORNEY*

(*To be executed on non-judicial stamp paper of the appropriate value in accordance with relevant stamp Act. The stamp paper to be in the name of the company who is issuing the power of Attorney*)

Know all men by these presents, we … do hereby constitute, appoint and authorise Mr/Ms. …. who is presently employed with us and holding the position of ……as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our bid for the work of …Including signing and submission of all documents and providing information/responses to Rail Vikas Nigam Limited, representing us in all matters, dealing with Rail Vikas Nigam Limited in all matters in connection with our bid for the said project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

Dated this the …… day of …… 20....

(Signature of authorised Signatory)

……
(Signature and Name in Block letters of Signatory)
Seal of Company

Witness

Witness 1:	Witness 2:
Name:	Name:
Address:	Address:
Occupation:	Occupation:

**Notes:*

i) To be executed by all the partners individually, in case of a Joint Venture.
ii) The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.

Form: JV/3

FORMAT FOR POWER OF ATTORNEY TO LEAD PARTNER OF JOINT VENTURE (JV)

DELETED

[Other than Road bed and bridge contract]

Form: JV/4

DELETED

For Bridge Contract

Form: JV/4

DRAFT MEMORANDUM OF UNDERSTANDING (MOU[1])

DELETED

[1] *In case of existing joint venture, the certified copy of JV Agreement be furnished.*

For Roadbed Contract

Form: JV/4

DRAFT MEMORANDUM OF UNDERSTANDING (MOU[2])
For
JOINT VENTURE PARTICIPATION
BETWEEN

DELETED

[2] *In case of existing joint venture, the certified copy of JV Agreement be furnished.*

[Other than Road bed and bridge contract]

Form: JV/5

DRAFT FORMAT OF JOINT VENTURE AGREEMENT

DELETED

For Bridge Contract

Form: JV/5

DRAFT FORMAT OF JOINT VENTURE AGREEMENT

DELETED

For Roadbed Contract

Form: JV/5

DRAFT FORMAT OF JOINT VENTURE AGREEMENT

DELETED

Bill of Quantities (BOQ)

For Bill of Quantities, Please refer Volume-II

Bidders Qualification

To establish its qualifications to perform the contract in accordance with Section 3 (Evaluation and Qualification Criteria) the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder.

Form ELI - 1: Bidder's Information Sheet:

Bidder's Information	
Bidder's legal name	
Bidder's country of constitution	
Bidder's year of constitution	
Bidder's legal address in country of constitution	
Jurisdictional GST Assessing Officer's designation, address & email id	
Bidder's authorized representative (name, address, telephone numbers, fax numbers, e-mail address)	

The bidder shall attach copies of the following original documents with the form:

1. In case of single entity, articles of incorporation or constitution of the legal entity named above, in accordance with ITB 4.1 and 4.2.
2. Authorization to represent the firm or JV named in above, in accordance with ITB 20.2.
3. In case of JV, MOU to form JV or JV agreement, in accordance with ITB 4.1.

Form ELI - 2: JV Information Sheet

DELETED

Form FIN-1: Financial Situation

(Bidder must fill in this form separately)

NAME OF BIDDER

	Financial Data for Last 5 Years [Indian National Rupees]				
	Year 1:	Year 2:	Year 3:	Year 4:	Year 5
1. Total Assets					
2. Current Assets					
3. Total Liabilities					
4. Current Liabilities					
5. Net Worth [= 1 – 3]					
6. Working Capital [= 2 - 4]					
7. Profit Before Tax (PBT)					

_____

SEAL AND SIGNATURE OF THE BIDDER

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

_____

(Signature of CA/Auditor)

44.1.a.i.1.1.1.1.1 ***Name of CA/Auditor:_____***

Registration No: _____

_____

(Seal)

1. The bidder shall attach copies of the following original documents with the form:

Copies of the audited balance sheets, including all related notes, and income statements for the last five years, as indicated above, complying with the following conditions.

- All such documents reflect the financial situation of the Bidder or partner to a JV, and not sister or parent companies.
- Historic financial statements must be audited by a certified accountant.
- Historic financial statements must be complete, including all notes to the financial statements.
- Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).

2. Contents of this form should be certified by a Chartered Accountant/Auditor.

1. In the event that the audited accounts for the latest concluded Financial Year are not available, the Bidder shall furnish information pertaining to the last five financial years after ignoring the latest concluded financial year. In case, the bidder submits audited financial information for the last six or more years, only the figures for the latest five years shall be considered for evaluation.

Form FIN-2: Annual Construction Turnover for the last 5 years

Each Bidder must fill in this form separately:

NAME OF BIDDER

Annual Turnover Data for the Last 5Years (Construction only)			
Year	**Amount Currency**	**Exchange Rate**	**Indian National Rupees Equivalent**
Average Annual Construction Turnover for last 3 years			

1. The information supplied shall be substantiated by data in the audited balance sheets and profit and loss accounts for the relevant years and submitted as attachments to form Fin-1 in respect of the bidder or all partners constituting the bidder.

2. Contents of this form should be certified by a Chartered Accountant/Auditor.

3. In the event that the audited accounts for the latest Financial Year are not available, the Bidder shall furnish information pertaining to last three financial years after ignoring the latest financial year. In case the bidder submits audited financial information for the last four or more years, only the figures for the latest three years shall be considered for evaluation.

Form FIN-3: Current Contract Commitments / Works in Progress

Bidders should provide information on their current commitments on all contract that have been awarded, or which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Contract Commitments

SN	Des-crip-tion of work	Contract No. & date	Name & address of Employer, Tel./Fax/ Email	Value of Con-tract in INR	Stipulated Period of completion	Value of Balance work	Anti-cipa-ted date of Com ple-tion
1							
2							
Total							

Note: Enclose Certificate(s) from Engineer(s) Incharge (not below the rank of Executive Engineer) for Value of outstanding work. In case it is not feasible to furnish certificate from all the units the bidder should record the following certificate on Fin 3:

"Certified that current commitments on all the contracts that have been awarded or for which a letter of intent or acceptance has been received or for the works in progress or the works approaching completion, value of outstanding work has been indicated in the above table correctly. It is further certified that if later on the employer discovers that information provided in the table is incorrect then the employer will treat our bid invalid and it will be liable for rejection"

Form EXP-2(a): Specific Construction Experience

Fill up one form per contract

Contract of Similar Size and Nature			
Contract No.		**Contract Identification**	
Award Date		**Completion Date**	
Role in Contract	❑ **Contractor**	❑	❑ **Subcontractor**
Total Contract Amount	**INR**		
If partner in a JV or subcontractor, specify participation in total contract amount	**Percent of Total:**	**Amount: INR**	
Employer's Name, Current Address and Current Telephone/Fax Number, E-mail			
Description of the similarity in accordance with Criteria 2.3.1 (a) of Section 3			

The bidder shall attach a copy of the Certificate(s) issued by the employer in support of the information being furnished in each Exp (2a) form, failing which the claim of the bidder shall be liable to be rejected.

Work experience certificate from private individual shall not be considered. However, in addition to work experience certificates issued by any Govt. Organisation, work experience certificate issued by Public listed company having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at least 5 years prior to the date of closing of tender, shall also be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such certificates.

In case tenderer submits work experience certificate issued by public listed company, the tenderer shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate.

Form EXP-2(b): Specific Construction Experience

Fill up one form per contract

Contract of Similar Size and Nature			
Contract No.		**Contract Identification**	
Award Date		**Completion Date**	
Role in Contract	❑ **Contractor**		❑ **Subcontractor**
Total Contract Amount	**INR**		
If partner in a JV or subcontractor, specify participation in total contract amount	**Percent of Total:**	**Amount: INR**	
Employer's Name, Current Address and Current Telephone/Fax Number, E-mail			
Description, quantity & period of execution of the key activities in accordance with Criteria 2.3.1 (b) of Section 3			

Copy of Certificate(s) issued by the employer in support of the information being furnished above, shall be attached with each respective Exp (2b) form, as per

detailed requirements indicated in note 6 below clause 2.3.1 of Section 3 failing which the claim of the bidder shall be liable to be rejected.

Work experience certificate from private individual shall not be considered. However, in addition to work experience certificates issued by any Govt. Organisation, work experience certificate issued by Public listed company having average annual turnover of Rs 500 crore and above in last 3 financial years excluding the current financial year, listed on National Stock Exchange or Bombay Stock Exchange, incorporated/registered at least 5 years prior to the date of closing of tender, shall also be considered provided the work experience certificate has been issued by a person authorized by the Public listed company to issue such certificates.

In case tenderer submits work experience certificate issued by public listed company, the tenderer shall also submit along with work experience certificate, the relevant copy of work order, bill of quantities, bill wise details of payment received duly certified by Chartered Accountant, TDS certificates for all payments received and copy of final/last bill paid by company in support of above work experience certificate.

EQC FORM NO.1

Clause No & Clause heading	Details of value of work/quantity of activity and References (Folio No.) of Documents through which criteria against each item is being met.
2 Qualification	
2.1.1 Conflict of Interest	
2.1.2 Share of partners	Not applicable
2.1.3 Disqualification of Bidder	
2.2 Financial Status	
2.2.1 Historical Financial Performance	
2.2.2 **Average** Annual Construction Turnover	
2.2.3 Net Worth	
2.2.4 Bid Capacity	
2.3 Experience	
2.3.1 Specific Construction Experience (a) Contracts of Similar Size and Nature (I) Single Contract (II) Two Contracts (b) Construction Experience in Key Activities (i) S&T– Installation, testing and commissioning of EI/SSI/PI/RRI works	
2.4 Personnel Undertaking submitted	
2.5 Equipment Undertaking submitted	
2.6 Specialist sub-contractor undertaking submitted	Not Applicable

FORM NO. 2

CHECKLIST FOR CLAUSES PERTAINING TO SUMMARY REJECTION OF BID

We, the undersigned, declare that we have read and understood the content of ITB clauses mentioned below. We also understand that our bid shall be summarily rejected in case we fail to comply the requirements of undermentioned clauses;

ITB Clause No.	Reason for Summary Rejection
4.4	Non-submission of Affidavit
4.5	Non-submission of immediate information to the Employer in case Bidder ceases to fulfill eligibility in terms of ITB 4.3 & 4.4
14.9	Non-submission of the Letter of Price Bid (LPB) and/or Summary sheet of BOQ
16.4	Non-submission of the Letter of Technical Bid (LTB)
19.3	Bid not accompanied by an enforceable and compliant bid security

SEAL AND SIGNATURE OF THE BIDDER

Form-MII

Declaration for 'Local content' in terms of 'Public Procurement (Preference to Make in India) Order 2017', as amended up to 28 days prior to deadline for submission of bids, issued by Department of Industrial Policy and Promotion under Ministry of Commerce and Industry

Ref: Tender Notice No…… I / We declare that:

1. The offer submitted against the meets the 'Local Content' requirement as prescribed vide clause ITB 4.1 e and ITB 43.2.
2. The details of the local content and location(s) where local value addition is made in case of imported items, are as below:

BOQ Item no	Description in brief	BOQ Amount	Made in India Items: Amount of local content	Imported Items: Value added in India	Imported Items: Location of Value added in India
1					
2					
….					
Total		**A**	**B**	**C**	

Total Local Content: B + C

% of local content in total BOQ cost: …..%

3. Fulfilment of the aforesaid requirements shall also be ensured from the subcontractors and that the above statement contains information for the entire contract.

Signature of the Bidder

PART II

Work's Requirements

Section 5

Works Requirements

Section 5 – Works/Employers Requirements

This Section contains the Specification, the Drawings, and supplementary information that describe the Work to be procured.

I N D E X

S. No.	Description	Pages
1	Safety and Security	2 to 16
2	General Information and Scope of work	17 to 30
3	Site Facilities for the Employer and the Engineer	31
4	Specifications	32
5	Personnel	33 to 36
6	Equipment	37 to 38
7	Drawings	39

1. Safety and Security

1.1 The works included in this contract are to be carried out close to the running tracks and public utilities, therefore, safety of running trains and the public is paramount. Therefore, all activities undertaken by the Contractor / his Sub-contractors shall ensure safety at all times. The contractor shall comply with the instructions issued by the Railway / Engineer / Employer from time to time to ensure safe running of trains while carrying out works. The rates quoted by the Contractor shall be deemed to include all expenditure incurred in compliance with the same.

1.2 Before starting any excavation work adjacent to existing track, the contractor shall ensure that necessary permissions have been obtained and required precautions have been taken for doing such work in terms Joint Procedure Order reproduced below:

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

A. A number of Engineering works in connection with gauge conversion/doubling/third line are in progress on various railways, which require extensive digging work near the running track, in close vicinity of the working S&T cables carrying vital safety circuits as well as electrical cables feeding the power supply to cabins. ASM room, RRI Cabin, Intermediate Block Huts (IBH) etc. Similarly, S&T organization under open line or construction units under CAO/C, are executing various Signaling and Telecom works requiring digging of earth for laying of cables or casting of foundations for the erection of signal posts etc. RailTel is also executing the work of laying of quad cable and OFC on various Railways as a part of sanctioned works for exclusive use of Railways for carrying voice and data i.e. administrative and control communication, PRS, FOIS etc. or shared by RailTel Corporation of India Ltd. On certain sections digging is also required for laying of electrical cable and casting of foundation for the erection of OHE masts by Electrical Deptt. Generally, these works are executed by contractors employed by these organisations.

B. However, while carrying out these works in the vicinity of working signaling, telecommunication and electrical cables, at times, cable cuts take place due to JCB machines working along the track or during the digging work being done by contractors carrying out the Civil Engineering Works. Similarly, such cable cuts are also resulting due to works undertaken by S&T or Electrical departments. Such cable faults result in the failure of vital signaling and telecommunication circuits & electrical installations.

C. Henceforth, the following joint procedure shall be followed by Engineering, Electrical and S&T (and RailTel organisation, wherever such works are being done by them) officers of the respective divisions and by the construction organisation, while carrying out any digging work near to existing signaling & telecommunication and electrical cables, so that the instances of cable cut due to execution of works, can be controlled and minimized.

1. S&T Department (and RailTel, where they have laid the cables) and Electrical department shall provide a detailed cable route plan showing exact location of cable at an interval of 200m or wherever there is change in alignment so that the same is located easily by the Engineering official/contractor. In addition, S&T department and Electrical department shall also provide cable markers along the alignment of the cable. These cable route plans

shall be made available to the Sr.DEN/DEN or Dy. CE/C, as the case may be, by Sr. DSTE/DSTE or Sr. DEE/DEE of the divisions or Dy. CSTE/C or Dy.CEE/C within 15 days in duplicate. Sr.DEN/DEN or Dy. CE/C will send copies to their field unit i.e. AEN/SE/P. Way & Works.

2. Before taking up any digging activity on a particular work by any agency, Sr. DSTE/DSTE or Sr.DEE/DEE of the section shall be approached in writing by the concerned Engg. or S&T or Electrical officer for permitting to undertake the work. Sr. DSTE/DSTE or Sr.DEE/DEE, after ensuring that the concerned executing agencies including the contractor have fully understood the S&T and Electrical cable route plan shall permit the work in writing within 7 days of the request by concerned department.

3. After getting the permission from S&T or Electrical department as the case may be, the relevant portion of the cable route plan shall be attached to the letter through which permission is issued to the contractor by concerned Engg. official for commencement or work and ensuring that the contractors have fully understood the cable route plan and precautions to be taken to prevent damage to the underground cables. The contractor shall be asked to study the cable plan and follow it meticulously to ensure that the safety of the cable is not endangered. Such a provision, including any penalty for default, should form part of agreement also. It is advisable that a suitable post of SE/Sig or SE/Tele or SE/Electrical (TRD or G) shall be created chargeable to the estimates of doubling/gauge conversion, who can help Engg. agencies in the execution of the work. However basic responsibility will be of the department executing the work and the Contractor. Creation of posts is not mandatory.

4 The SE/P. Way or SE/Works shall pass on the information to the concerned SE/Sig SE/Tele or SE/Electrical (TRD or G) about the works being taken up by the contractors in their sections at least 3 days in advance of the day of the work. In addition, Engineering control shall also be informed by SE/P. Way or SE/Works, who in turn shall pass on the information to the test room/network operation centre of RailTel/TPC/Electrical control.

5. On receiving the above information, SE/Sig or SE/Tele or SE/Electrical (TRD or G) shall visit the site on or before the date of taking up the work and issue permission to the contractor to commence the work after checking that adequate precautions have been taken to avoid the damage to the cables. The permission shall be granted within 3 days of submission of such requests.

6. The name of the contractor, his contact telephone number, the nature of the work shall be notified in the Engineering control as soon as the concerned Engineering officials issue the letter authorizing commencement of work to the contractor. Test room shall be given copies. Test room shall collect any further details from the Engineering Control and shall pass it on to S&T/RailTel & Electrical officials regularly. In case the supervisors of concerned departments do not turn up on the day as advised in terms of para 4 and 5 above, the works of contractor should not be stopped on this account.

7. In case of works being taken up by the State Government, National Highway Authority etc., the details of the permission given i.e. the nature the work, kilometer etc. be given to the Engineering control including the contact person's number so that the work can be done in a planned manner. The permission letter shall indicate the contact numbers of Test room/network Operating Centre of RailTel/TPC/Elect. Control.

8. Where the nature of the work taken up by the Engineering department is such that the OFC or other S&T cables or Electrical cables is to be shifted and relocated, notice of minimum one week shall be given so that the Division/RailTel/Construction can plan the works

properly for shifting. Such shifting works shall in addition, for security and integrity of the cables, be supervised by S&T supervisors/RailTel supervisors/Electrical Supervisors.

9. The concerned SE/P. Way/SE/Works/SE/Sig/SE/Tele/SE/Electrical (TRD or G) or RailTel supervisors supervising the work of the contractor shall ensure that the existing emergency sockets are not damaged in view of their importance in providing communication during accident/emergency.

10. In case of minor nature of works where shifting of cable is not required, in order to prevent damage to the cable, the Engineering contractor shall take out the S&T or optical fiber cable or Electrical cable carefully from the trench and place it properly alongside at a safe location before starting the earthwork under the supervision of SE/Sig or SE/Tele or SE/Electrical (TRD or G). The cable shall be reburied soon after completion of excavation with proper care including placement of the brick over the cable under the supervision of S&T or Electrical supervisors. However, the work will be charged to the concerned engineering works. The responsibility for ensuring availability of SE (Signal), SE (Electrical) as per para 4 and 5 above lies with the respective department. The contractor will go ahead with the shifting of cables as per the program decided and he will not be held responsible for any cable cut.

11. In all the sections where major project are to be taken up/going on RailTel/S&T department shall deploy their official to take preventive/corrective action at site of work. As regards Electrical Department, the official may be deputed on need basis.

12. No new OFC or quad cable shall be laid close to existing track. It shall be laid close to the Railway boundary on one side of the Railway track to the extent possible to avoid any interference with the future works (doubling etc.). It shall be ensured in the new works of cable laying that the cable route is properly identified with electronic or concrete markers. Wherever multiple cables are laid in a trench, RFID markers may be provided for easy identification of the cable. Henceforth, wherever cable laying is planned, before undertaking the cable laying work, the cable route plan of the same shall be prepared by the Dy. CSTE/A or Dy.CEE/C and shall be got approved from the concerned Sr. DSTE/DSTE or Sr.DEE/DEE and also from the concerned Dy. CE/C for new lines and from the concerned Sr.DEN for all other projects including GC etc., to avoid possible damages in future. Such approvals shall be granted within 15 days of the submission of the request.

13. The works of excavating the trench and laying of the cable should proceed in quick succession, leaving a minimum time between the two activities.

14. In case damage caused to OFC/Quad cable or Electrical cable during execution of the work, the contractor is liable to pay a penalty for damaging the cable. Penalty shall not be levied in case of the following: -

    i). Detailed cable route plan as per clause C-1 not provided by concerned department or cable is not protected as per laid down procedures.

    ii). The alignment of the cable does not tally with the information provided to the contractor.

    iii). The cable depth is found to be less than 800 mm from normal ground level.

    iv). No representative of S&T department/RailTel was available at site guarding the cables on the fixed pre-determined date and time.

15. Penalty to be imposed for damages to cable shall be as under: -

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

Necessary debit in this regard shall be raised on the department undertaking the work who shall in turn levy the penalty on the defaulting contractor. S&T department shall raise the debits in case of damage to OFC or Quad or Signaling cable and Electrical department shall raise the debits in case of damage to Electrical cable.

16. Railways will not lodge FIR with RPF in case of works being executed by authorized contractors of Railways who have been duly permitted to execute the works in accordance with this JPO. Joint note by the supervisors of the concerned department shall be prepared and the responsibility of the cable cut should be decided without involving RPF. The joint note deciding the fact whether the contactor should be penalized shall be completed in a day's time from the occurrence of cable cut.

    In all other cases, when the cable is cut by an agency that was not permitted to execute any work, FIR should be lodged with RPF.

17. While giving permission for taking up the works, concerned departments may note that earthwork by engineering contractors will normally be done by machines except in a few isolated locations where the quantity of earth work is very less.

18. Railways shall make necessary correction in their future contract so that this JPO can also be enforced contractually.

19. In case of damages to OFC, RailTel should be paid 5/6th of the penalty recovered. RailTel shall raise demands on the S&T department in this regard.

20. All types of signaling & OHE bonds i.e. rail bond, cross bond and structure bond shall be restored by the contractor with a view to keep rail voltage low to ensure safety of personnel.

21. Above joint circular shall be applicable for construction as well as open line organization of Engineering, S&T and Electrical.

22. S&T cable and electrical cable route plan should be prepared by the concerned S&T and Electrical officers respectively and got approved as stipulated in para C-12 before undertaking the work. The completion cable route plan should be finalized block section by block section as soon as the work is completed.

23. All cable laying works shall be executed as per laid down technical specifications, such as protection measures/protective cover, compaction of refilled material etc.

1.3. Working near running line

1.3.1 The contractor shall not allow any road vehicle belonging to him or his suppliers etc. to ply in railway land next to the running line. If for execution of certain works viz earth work for parallel railway line and supply of ballast for new or existing rail line, gauge

conversion etc, road vehicles are necessary to be used in railway land next to the railway line, the contractor shall apply to the Engineer for permission giving the type & no. of individual vehicles, names & license particulars of the drivers, location, duration & timings for such work / movement. The Railways/Employer/ Engineer or his authorized representative will personally counsel, examine & certify, the road vehicle drivers, contractor's flag men & supervisor and will give written permission giving names of road vehicle drivers, contractor's flag men and supervisor to be deployed on the work, location, period and timing of the work. This permission will be subject to the following obligatory conditions*:*

1.3.2 Road vehicles can ply along the track after suitable cordoning of track with minimum distance of 6 meters from the centre of the nearest track. For working of machinery close to the running tracks or plying of road vehicles during night hours, the contractor shall apply to the Engineer in writing for permission, duly indicating the site details in a neat sketch and safety measures proposed to be taken. Subject to the approval of concerned Railway authorities, the Engineer or his authorized representative will communicate permission to the contractor / contractor's representative. The contractor and his men shall strictly adhere to the instructions given along with such permissions.

1.3.3 Nominated vehicles and drivers shall be utilized for work in the presence of at least one flag man and one supervisor certified for such work. In order to monitor the activities during night hours, additional staff may have to be posted based on the need of the individual site.

1.3.4 The Contractor' machinery, equipment and vehicles shall normally operate 6 m clear of track. Any movement / work at less than 6m and upto a minimum of 3.5m clear of track centre, shall be carried out only in the presence of a person (including any railway employee) authorized by the Engineer. No part of the road vehicle shall be allowed at less than 3.5m from track centre. Cost of such railway employee shall be borne by the Employer.

1.3.5 The Contractor's machinery and equipment like Cranes, Flash Butt Welders, Ballasting machinery, Compactors, Track Laying Systems etc., are required to operate close to the existing line carrying traffic. Contractor is fully responsible for operating these machineries without endangering the safety of the running line and traffic.

1.3.6 <u>Safety Fencing:</u>

(i) Before commencing any work close to the running track, the Contractor shall provide safety fencing and obtain the specific permission of Engineer to commence the work in that stretch.

(ii) The fencing shall be for a height of 1.5 meters with wooden/Casuarina balli posts of length 2.1 m at 3 m centre to centre spacing as per relevant BOQ item.

(iii) The Contractor shall maintain the safety fencing in good working condition throughout the period till the work in a given stretch is completed. He can remove the fencing after getting the approval of Engineer. The fencing material will be the property of the Contractor. Serviceable materials obtained from the released fencing can be re-used for providing fencing in subsequent stretches.

(iv) The Contractor will be paid for providing safety fencing along the track as per the relevant item in the BOQ.

1.4. The contractor's special attention is drawn to Para 826 of Indian Railways Permanent Way Manual introduced under Advance Correction Slip no. 69 dated 23.05.2001, reproduced below which should invariably be complied with.

"826 Safe working of Contractors -- A large number of men and machinery are deployed by the contractors for track renewals, gauge conversions, doublings, bridge rebuilding etc. It is therefore essential that adequate safety measures are taken for safety of the trains as well as the work force. The following measures should invariably be adopted:

(a) The contractor shall not start any work without the presence of Railway supervisor at site.

(b) Wherever the road vehicles and / or machinery are required to work in the close vicinity of railway line, he work shall be so carried out that there is no infringement to the railway's schedule of dimensions. For this purpose, the area where road vehicles and / or Machinery are required to ply, shall be demarcated and acknowledged by the contractor. Special care shall be taken for turning / reversal of road vehicles / machinery without infringing the running track. Barricading shall be provided wherever justified and feasible as per site conditions.

(c) The "look out and whistle" caution orders shall be issued to the trains and speed restrictions imposed where considered necessary. Suitable flag men / detonators shall be provided where necessary for protection of trains.

(d) *The supervisors / workmen should be counseled about safety measures. A competency certificate to the contractor's supervisor as per proforma annexed shall be issued by AEN which will be valid only for the work for which it has been issued.*

(e) The unloaded ballast / rails / sleepers / other P. Way materials after unloading along track should be kept clear off moving dimensions and stacked as per the specified heights and distance from the running track.

(f) Supplementary site specific instructions, wherever considered necessary, shall be issued by the Engineer.

COMPETENCY CERTIFICATE

Certified that Shri_____ P. Way supervisor of M/S_____has been examined regarding P.Way working on_____ work. His knowledge has been found satisfactory and he is capable of supervising the work safely.

ASSISTANT ENGINEER"

1.5. The work of formation in banks and cuttings throughout the length of doubling is adjacent to track under running traffic. Many of the bridges on the proposed double line are to be constructed either as extensions or just adjacent to the existing bridges under running traffic. The work of Installation of Track throughout the length of doubling is adjacent to track under running traffic. The work of Installation of Track and Signals in the Station yards including alterations to the existing Track and Signals has to be done adjacent to or in replacement of the existing Track and Signals which are under running traffic. The contractor shall ensure that the safety of the running lines and running traffic is not endangered, because of his work.

1.6. Any traffic/traction blocks, temporary speed restrictions and caution orders required in this connection shall also be got sanctioned from the Railway authorities well in advance, through the Engineer. The Railways may sanction the same for specific sites within the overall recovery time available in the Railway's time table. The contractor shall have to schedule his programme according to the convenience of the Railways. No claim from the contractor for any delay/inconvenience/loss on this account shall be entertained by the Employer.

1.7. The contractor shall provide at site at his own cost, all protection measures including exhibition and lighting of all Temporary Engineering Signals as per Railway rules, instructions and norms. All lights provided by the contractor shall be screened so as not to interfere with any signal light on the Railways or with any traffic or signal lights of any local or other authority.

1.8. Ancillary and Temporary works

(a) The Contractor's proposals for erection of all ancillary and temporary works shall be in conformity with the proposals submitted along with the tender and modifications thereto as approved by the Engineer.

(b) The Contractor shall submit drawings, supporting design calculations where called for by the Engineer and other relevant details of all such works to the Engineer for approval at least one month before he desires to commence such works. Approval by the Engineer of any such proposal shall not relieve the contractor of his responsibility for the sufficiency of such works.

(c) The contractor shall, at his own cost, design and provide any temporary arrangements including relieving/service girders required in connection with the above said works and remove the same, when no longer required. These arrangements shall conform to Railway norms. The contractor shall obtain all necessary approvals and sanctions of the concerned Railway authorities including Commissioner of Railway Safety through the Engineer in advance and well in time

(d) The contractor shall ensure and be entirely responsible for proper design, fabrication, provision and upkeep of all temporary arrangements and all associated activities so as not to endanger safety of any assets, running track,

traffic and traveling public and for following all extent instructions, norms, practice and procedures laid down by Railway authorities in this respect, which may be ascertained from the Railways through the Engineer.

(e) If required, Railways may, in order to ensure the safety of the running track, post at site Regular Railway staff to watch the efficacy and safety of temporary arrangements and protection measures round the clock for the period the same exist in the running line and till the running line is restored back to normal. Railways may also supervise the insertion, maintenance and removal of the temporary arrangements. The cost of such staff shall be borne by the Employer.

(f) Notwithstanding the above, the contractor shall not, however, be relieved of his responsibility and obligation as aforesaid.

(g) Save as provided in Para 7 (e) above, the contractor shall bear the cost of complying with all safety requirements. No extra payment will be made for complying with the safety provisions under this chapter and the cost of all such elements to meet the safety requirements shall be deemed to be included in the Bill of Quantities.

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

1.10 Suitable barricading to forewarn road vehicle driver shall be provided by the contractor. The luminous tape, strung on bamboo or steel poles can be considered for such barricading. Barricading arrangement should be got approved by the Engineer.

1.11 **Indemnity by Contractor**

The Contractor shall indemnify and save harmless the Railway / Employer / Engineer from and against all actions, suit proceedings, losses, costs, damages, claims, and demands of every nature and description brought or recovered against the Railways / Employer / Engineer by reason of any act or omission of the contractor, his agents or employees, in the execution of the works or in his guarding the same. All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the actual loss or damage sustained, and whether or not any damage shall have been sustained.

1.12. **Damage to Railway Property or Life or Private Property**

The contractor shall be responsible for all risks to the works and for the trespass and shall make good at his own expense all loss or damage whether to the works themselves or to any other property of the Railway or the lives of persons or property of others from whatsoever cause in connection with the works until they are taken over by the Employer and this although all reasonable and proper precautions may have been taken by the Contractor, and in case the Railway/Employer/Engineer shall be called upon to make good any costs, loss or damages, or to pay any compensation, including that payable under the provisions of Workmen's compensation act or any

statutory amendments thereof to any person or persons sustaining damages as aforesaid, by reason of any act, or any negligence or any omissions on the part of the contractor, the amount of any costs or charges including costs and charges in connection with legal proceedings, which the Railway/Employer/Engineer may incur in reference thereto, shall be charged to the contractor. The Railway / Employer / Engineer shall have the power and right to pay or to defend or compromise any claim of threatened legal proceedings or in anticipation of legal proceedings being instituted consequent on the action or default of the contractor, to take such steps as may be considered necessary or desirable to ward off or mitigate the effect of such proceedings, charging to Contractor, as aforesaid, any sum or sums of money which may be paid and any expenses whether for reinstatement or otherwise which may be incurred and the propriety of any such payment, defence or compromise, and the incurring of any such expense shall not be called in question by the Contractor.

1.13. **Safety of Public**

(i) The Contractor shall be responsible to take all precautions to ensure the safety of the Public whether on Public or Railway property and shall post such look out men as may in the opinion of the Engineer be required to comply with regulations pertaining to the work.

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

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

1.14. **Reporting of Accidents**

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

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

1.16 **Security Measures**

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

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

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

(d) The contractor shall be responsible for security of works for the duration of the contract and shall provide and maintain continuously adequate security personnel to fulfill these obligations. The requirements of security measures shall include, but not be limited to, maintenance of Law and Order at site, provision of all lighting, guard, flagmen, and all other measures necessary for protection of works within the colonies, camps and elsewhere at site, all materials delivered to the site and all persons employed in connection with the works continuously throughout working and non-working periods including nights, Sundays and holidays, for the duration of the contract. However, at work sites in close proximity of traffic corridors where public and traffic are likely to come close to the work area, suitable barricading as proposed by contractor and approved by Engineer shall be provided.

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

1.17 Contractor will have to comply the instructions circulated for *Safety on Worksites Specially Doubling and Third line Works being implemented by RVNL*, circulated vide RVNL's letter No. 2005/RVNL/P/CC/Circular Dt. 10.02.2009 and letter of even No. Dt. 12.03.10 (enclosed as Annexure I and II of this chapter) and any subsequent instructions on this issue.

It is presumed that bidders have gone through the Rail Vikas Nigam Ltd.'s above mentioned letters including any subsequent instructions on this issue if any, before quoting the rates.

Annexure-I

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Rail Vikas Nigam Limited

1st Floor, August Kranti Bhawan, Bhikaji Cama Place, R.K.Puram, New Delhi-110066.
Ph.:011 – 26738505; Fax: 011 – 26738595. Mobile No. 9810900301 E – mail: cdzo@rvnl.org

No. 2005/RVNL/P/CC/Circular Dated: February 10, 2009

The CPMs – Delhi, Kolkata, Chennai, Secunderabad, Jaipur, I/Mumbai, II/Mumbai, I/Bhubaneswar, II/Bhubaneswar, Pune, Bilaspur, Hubli at Bangalore and GM/P-II/Delhi.

Sub: Projects especially doubling/3rd line projects being implemented by Rail Vikas Nigam Limited.

Ensuring safety at work site is of paramount importance. It is disturbing to note that despite repeated counseling, execution of work involving movement of plant and machinery near existing running line without fixing proper barricading is still being permitted in some cases. Such unsafe practice must be stopped forthwith. Proper barricading and execution of work under required supervision must be ensured to avoid unlikely accidents and also to ensure quality.

In case of RVNL projects especially doubling/3rd line projects following measures must be taken: –

1. Fencing as per specification laid down in PCE circulars along the track at specified distance from centre line of existing track. The fencing should be maintained till the track is handed over to Railways. Accordingly at locations where it has been broken/stolen away, the same should be restored expeditiously.

2. Contractors to ensure patrolling by Cycle/Motor Cycle to prevent damage to fencing and to rectify as soon as it is detected.

Contd....2.

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(2)

3. In the stretch where new formation is likely to be used by unauthorized vehicles and likely to create potential unsafe condition, lifting barriers at points where contractor's vehicles are required to enter should be provided and the same should be manned to allow entry to only contractor's vehicles and prevent entry of unauthorized vehicles.

4. Other likely entry points on the new formation must be suitably blocked by providing physical obstructions by stacking sleepers or by cross trenches or by erecting fence to prevent entry of unauthorized vehicles. Frequent check should be exercised to ensure that unauthorized vehicles do not ply.

5. Reducing number and length of such stretches by spreading ballast and linking of track as expeditiously as possible.

6. Laying welded rail panels along the fencing to create additional barriers for preventing vehicles coming near to the existing track.

7. PMC should be advised to educate his supervisor for each stretch to ensure Safety who should be well conversant with safety instructions and should see that the same are not violated. PMC has to be made accountable for lapses on the safety aspects.

8. Periodical formal counseling of all RVNL officials and PMC officials regarding safety instructions and review violations coming to light and taking appropriate action. This should be done during the monthly progress review meetings.

9. Counseling of drivers and operators of machinery regarding safety aspect during routine inspection of RVNL and PMC officials.

Contd.....3.

132
2

(3)

10. All the drivers/machine operators should have competency certificate issued by PMC after examining their knowledge about safety. Only authorized drivers can ply within 6.5 of the existing track.

11. Pursuing railway for issue of required caution order to Drivers of trains wherever required in terms of Railway Board's instructions/PCE circulars.

12. In case work is required to be carried out within 3.5 M of existing running line, ECoR should be advised well in time and requested to provide look out men and Railway Supervisors for the site. At such locations close supervision must be ensured.

In terms of contract conditions, preventing entry of outsiders at the work sites is the responsibility of contractor and this has to be ensured.

10/2/09

Rail Vikas Nigam Ltd.
Received 1058
Signature
Name
Date 10/2/09

(Arun Kumar)
a/c Executive Director/Works

Note: CPM/BBS must report action taken on inspection note of CE/TM/ECoR advised vide GM/Engg/ECoR's Letter No. W.4/287/CE/TM/Inspn/223 dt. 16.01.2009.

Copy to ED/P, ED/Electrical, ED/S&T and AGM/Bhopal for information and necessary action.

Copy to Secy/MD for kind information of MD
Copy to Secy/DP for kind information of DP

Annexure II

Rail Vikas Nigam Limited

Ist Floor, August Kranti Bhawan, Bhikaji Cama Place, R.K.Puram, New Delhi–110066.
Ph: 011-26738505, Fax: 011-26738595, Mobile No: 9810900301, E-mail: edw@rvnl.org

No.2005/RVNL/P/CC/Circular

12th March, 2010

The Chief Project Managers,
Delhi, Delhi/HQ, Jaipur, Mumbai, Secunderabad, Hubli at Bangalore, Chennai, Bilaspur, Raipur, Bhubaneshwar-I, Bhubaneshwar-II, Kolkata.

The General Managers,
Project-II/Delhi, Project-III/Delhi.

Sub: Safety on Worksites Specially Doubling and Third Line Works being implemented by RVNL

Detailed procedure for ensuring safety at the work sites has been laid down in the Standard Bidding Document (Section V: Works requirement). A detailed circular was also issued by the undersigned vide letter of even number dated 10.02.2009 (enclosed for ready reference). It has, however, been noted that appropriate measures to ensure safety at work sites especially for doubling and 3rd line projects are not in place in some of the cases. On several occasions, dedicated safety officers to ensure safety have also not been deputed by the contractors.

It has, therefore, been decided that to ensure safety at all the work sites all the time, a dedicated Safety officer duly trained as per the provisions of the contract shall be posted by the contractor for each project. Following works will in general be assigned to safety officer.

1. The Safety officer (in charge) shall be from the permanent rolls of the contractor. He will work under the administrative control of the Project Manager of the contractor.

2. The person from any sub-contractor deputed by the main contractor shall not be designated as Safety officer.

3. The Safety officer shall be overall in charge of the safety methods being undertaken at various work sites. He shall not be given any other task related to the project planning and execution.

4. The Safety officer should be well versed with the safety aspects related to worksites in the vicinity of running railway lines and should impart training to the officials assisting him.

5. The Safety officer shall be given suitable means of transport (depending on the requirement) by the contractor to approach all the work sites frequently and ensure that adequate precautions to ensure safety have been taken. Following items shall be specifically done by the Safety officer.

a) Ensuring the provision of the safety fencing. Any shortfall shall be made good immediately.

b) Availability of suitable lookout men at each working site. The lookout men shall be in possession of hooters, safety helmet and retro-reflective jacket to warn the site engineer/supervisor and operators/drivers of the equipments/vehicles working near the running track.

c) Arranging issuance of competency certificates by Employer/Engineer with the operator/driver of each equipment/vehicle before deputing for work.

d) Take assurance from the contractor officials at regular interval of complying with the safety instructions.

e) Any safety violation to be advised to all concerned and remedial action taken thereof.

6. The Safety officer will frequently counsel the contractor engineers/supervisors/ operators/drivers/lookout men about safety provisions during his day to day inspections and keep a record of the same. The Safety officer will prepare a monthly report of the safety inspections carried out and remedial action taken thereof and send it to the Project Manager of the contractor and the employer/engineer.

7. The contractor should open new sites only after discussing the safety measures to be undertaken with his Safety officer and obtaining the permission from Employer/ Engineer.

8. It shall be the duty of the Project Manager and Safety officer of the contractor that the instructions contained in the agreement related to safety and the same issued by the Railway/Employer/Engineer from time to time are strictly complied with.

Based on the above, it is advised that a thorough review of the safety provisions may be undertaken and it should be ensured that competent safety officers are available on all the projects. This office may also be apprised of the action taken in this regard.

(Arun Kumar) (2/3/20)
Executive Director/Works

Copy to:

1. Secy to MD for kind information of MD.
2. Secy to DF for kind information of DF.
3. ED/Elect, ED/HQ, ED/P, ED/S&T for information.

2– GENERAL

2.0 SCOPE OF WORK

Design, Supply, Installation, testing & commissioning of Indoor Signal and Telecommunication work from Mangliyagaon (Incl.) to Budni (Incl.) Section with provision of Electronic Interlocking in 14 stations viz Pannod, Semaliyachau, Chapda, Kheri, Hathnora, Deoli, Kannod, Khategaon, Pipaliya Nankar, Bapcha, Nasrullahganj, Salkanpur, Balkhera, Budni and alteration in existing interlocking system at Mangliyagaon station in connection with New Single Broad Guage Rail Line Between Indore to Budni in the state of Madhya Pradesh, India. This includes provision of Electronic Interlocking, MSDAC, Power Supply arrangements, Absolute Block Working with UFSBI, Data Logger, Fuse Auto Changeover, Fire Alarm System, Earth Leakage Detector & other work etc. This also includes alteration in existing interlocking system at Budni station for 1st phase and finally provision of new Distributed Electronic interlocking system for 2nd phase.

2.2. Introduction:

2.1.1 This work is in connection with construction of new BG Railway line between Indore to Budni under Ratlam division of Western Railway and Bhopal division of West Central Railway of Madhya Pradesh state. Aforesaid work is being executed by Project Implementation Unit (PIU) Bhopal of Rail Vikas Nigam Limited.

This work pertains to Design, Supply, Installation, testing & commissioning of Indoor Signal and Telecommunication work from Mangliyagaon (Incl.) to Budni (Incl.) Section with provision of Electronic Interlocking in 14 stations viz Pannod, Semaliyachau, Chapda, Kheri, Hathnora, Deoli, Kannod, Khategaon, Pipaliya Nankar, Bapcha, Nasrullahganj, Salkanpur, Balkhera, Budni and alteration in existing interlocking system at Mangliyagaon station in connection with New Single Broad Guage Rail Line Between Indore to Budni in the state of Madhya Pradesh, India.

2.1.2 Indore – Budni new rail line project (198Kms) is a part of New Single Broad Guage Rail Line between Indore to Jabalpur via Budni.
Ministry of Railways has approved the project of construction of a new railway Broad Gauge (BG) an electrified single line between Budni to Indore located in the states of Madhya Pradesh. The proposed rail link branches out from the new railway line, at Mangaliyagaon station of the Ratlam Division of the Western Railway in Madhya Pradesh. In this particular tender, the proposed rail line will be from Mangaliyagaon and will reach Budni, located in the state of Madhya Pradesh.

The estimated length of this new rail link is 198 km. This rail link will be with a Broad-Gauge railway designed for 25T loading.
State Involved :- Madhya Pradesh
Total Length – 198 km

Number of New Crossing Stations– 13 Nos
(i) Panod
(ii) Semaliya Chau
(iii) Chapda
(iv) Kheri
(v) Hathnora
(vi) Deoli
(vii) Kannod
(viii) Khategaon
(ix) Pipaliya Nankar
(x) Bapcha
(xi) Nasrullahganj
(xii) Salkanpur
(xiii) Balkhera

2.1.3 Bidder is advised to check the accessibility of aforesaid proposed new rail line work by himself.

2.1.4 Scope of work majorly consist of following items:

2.1.5

S.No.	Description	Scope
1.	Indoor work of Signalling for New Electronic Interlocking system.	14 stations viz: Pannod, Semaliyachau, Chapda, Kheri, Hathnora, Deoli, Kannod, Khategaon, Pipaliya Nankar, Bapcha, Nasrullahganj, Salkanpur, Balkhera & Budni.
2.	Indoor work of alteration in existing interlocking	01 station viz: Mangliyagaon.
3.	Phase work in existing interlocking system	01 station viz Budni
4	Drawing & Designing work	All the stations mentioned above
5.	Provision of Multi Section Digital Axle Counter with auto resetting facility in yards.	All the stations mentioned above with auto resetting facility as dual track detection is with conventional DC Track Circuit
6.	Block working with UFSBI	All the stations mentioned above
7.	Provision of Fire alarm system, Fuse auto changeover system, ELD etc.	All the stations mentioned above

Monsoon period in the area

Normally, monsoon period in the project area is from June to Sept months. It is desirable that the contractor plan to work accordingly.

2.1.6 Introduction of contract packages

(i) Availability of Land :

The required land for the execution of works is available along the alignment.

(ii) Approaches to the project site :

a. Approach to project length is available through revenue land from existing road, at reasonable number of locations.
b. Deleted
c. **Queries in the area:** Deleted
d. **Status of Clearances / Permits required for Construction:** Deleted
e. Deleted

(iii) Ballast Queries in the area: **Deleted**

2.2 Salient features of the section:

i)

Sl. No	Description	Provision of NEW BG Single line between Mangliyagaon to Kheri
1	Length of Section	198 Kms.
2	Tunnels	02 Nos
3	Maximum Degree of curvature	N/A
4	No. of crossing Stations	13
5	No. of Junction Stations	02
6	LC gates	Nil
7	Loading Standard	25 T Axle Load
8	ROB	N/A

ii) ELECTRIFICATION

1. Deleted
2. TSS, SP, SSP AND LT SUB-STATIONS TO BE PROVIDED: The location of these switching stations will be as per the approved plans Railway Telecommunication facilities have to be provided at the TSS/SP/SSP detailed above.
3. The work is to be executed as per the latest instructions, AC Traction Manual, SMIs and drawings issued by Ministry of Railways, RDSO, CORE and CEE/Railway/RVNL till 28 days before deadline for submission of bids.

4. DELETED
5. DELETED
6. DELETED

iii) SIGNALING & TELECOMMUNICATION WORKS

Signaling & telecommunication works in connection with the provision of new BG railway line are proposed to be executed as a part of this contract. Apart from Indoor signaling works at 13 new crossing stations Pannod, Semaliyachau, Chapda, Kheri, Hathnora, Deoli, Kannod, Khategaon, Pipaliya Nankar, Bapcha, Nasrullahganj, Salkanpur, Balkhera and provision of new electronic interlocking system at Budni station in 2nd phase along with alteration at Mangliyagaon station. The work contains all the block sections to be provided with conventional single line absolute block working by means of UFSBI with BPAC.

2.3 Nature of Work:

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

2.3.1. **Civil:** DELETED

2.3.2. **SIGNALING & TELECOMMUNICATION WORKS:**

1. Provision of Route setting type centralised operation of points and signals with EI*/RRI* at all stations involved with yard remodeling in connection with New BG single line between Mangliyagaon to Budni on Ratlam & Bhopal Division of Western Railway and West Central Railway.
2. Supply, Installation, wiring, programming, testing of Electronic Interlocking by the RDSO approved manufacturer, provision of *MSDAC*/HASSDAC, and other related Indoor work in connection with New BG Line.
3. Provision of interlocking of stations along with commissioning by means of Two VDUs *at* stations.
4. Provision of Block Proving by Digital axle counters as per requirement an*d* approved Signal Interlocking Plans.
5. Designing and documentation including completion documents of signaling drawings for indoor work.
6. Supply and installation of signaling equipments viz. Electronic interlocking with wiring, operating VDU (Visual Display Unit), Integrated power supply equipment, Block Working with axle

counter, data logger with networking etc.

7. Indoor work of programming and commissioning of electronic Interlocking, erection of Relay rack, CT rack, wiring of relays, testing and alterations in circuits, installation of power supply equipments / IPS, operating VDU, data logger and networking, axle counter, installation of DG sets, painting and lettering of all indoor gears, releasing of all indoor gears etc.
8. *Testing of all indoor equipments for functional/operational requirements with all outdoor equipments like signals, points, track circuits, LC gates etc and carrying out necessary adjustments and modifications in consultation with Engineer. Preparation of all documents related with testing and test reports*
9. **Contractor's Drawings etc:** Any calculations, designs, drawings, schedules information, data, progress charts etc. required by the Engineer in connection with the contract, shall be furnished by the contractor at his own expense. The contractor will be required to furnish designs and calculations etc. for basic designs and employment schedule. In case of new developments in designs, comments on Research Designs and Standards Organization (hereinafter called RDSO) basic drawings/designs/ employment schedules, will be submitted by the contractor to the Engineer. If the RDSO's / CORE drawings / designs / equipments are not revised, contractor need not submit drawings / designs / employment schedules to the Engineer. In the event of the contractor suggesting any alternation/deviation in standard drawing, he shall submit the retraced drawings with full clarifications and justifications of the change to the Engineer. The Engineer, if convinced of the need of the alteration, shall approach RVNL for necessary approval.
10. **Additions and Alterations to Erected Equipment:**

    The Engineer may require additional installations or modifications to be carried out on the works he deems necessary, either during the execution or after a part or whole of the installations coming within the purview of the contract has been put into commercial service

2.3.3. ***OHE and General Electrical Works:*** *DELETED*

2.1. Special stipulations/Features:

2.4.1. **Civil Works:** DELETED

2.4.2. **Inspection of S & T Work**

2.4.2.1. S &T work is required to be carried out in accordance with the IRS specification for RRI/PI (S/36/87) and conforming to RDSO

Specifications No. RDSO/SPN/192/2005 for EI with latest amendments issued. The installation practices of all signaling gears should be as per the Signal Engg Manual Part I &II issued in September 2001 and to suit latest relevant correction slips. The work is required to be carried out in accordance with the RE manual for stations falling under 25 KV electrified traction. The execution is required to be carried as per standard specifications of RVNL. However, specifications, drawings and other details mentioned in BOQ or in special conditions, wherever applicable will prevail over the standard specifications.

2.4.2.2. The Signal & Telecom material to be supplied by the contractor as per RDSO Specifications/ Drawings will have to be procured from approved Vendors appearing in Vendor Directories of RDSO and to be supplied duly inspected by RDSO. Where there are not more than three Indian suppliers categorized as Approved Vendor for a particular item, developmental vendors can be considered for placement of bulk order without any quantity restrictions. (Ref RB letter no 2001/RS(G)/779/7Pt 2 dated 06.11.2018).

In case where there are more than three Indian suppliers categorized as Approved Vendor for a particular item, total quantity to be ordered on developmental sources shall be limited upto 20% of NPQ as per Railway Board's letter no. 2001/RS(G)/779/7 Pt 2 dated 25.06.2018. For procurement through RDSO Vendors for Developmental order, prior approval of RVNL's Engineer shall be obtained duly following conditions laid down in the aforementioned letters.

2.4.2.3. The Signal & Telecom material to be supplied by the contractor as per TEC/DOT/BSNL specification will have to be procured form DOT/TEC approved firms. The inspection of such items will however be carried out by RDSO provided the value is more than value stipulated in inspection policy of RDSO.

2.4.2.4. In case the contractor is supplying imported equipments from approved manufacturer, then in addition to manufacture's test certificate, such equipments shall be inspected by RDSO.

2.4.2.5. Signal & Telecom items not inspected by RDSO/ RITES for any reason will be inspected by the Engineer / Authorised Representatives of RVNL. In case of any difficulty in inspection, RVNL may decide the authority of inspection, either by any other Govt. agency or by consignee. Whenever materials are inspected by Authorised Representatives of the RVNL/Engineer, the contractor will be required to furnish his or manufacturer's Guarantee Certificate.

2.4.2.6. The RVNL shall have full power to reject any material that it may consider to be defective or inferior in quality, workmanship, or otherwise not in accordance with the Specification and the RVNL'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. Inspected and accepted material, if damaged during transit shall be replaced by the contractor free of cost prior to installation.

2.4.2.7. Inspection Charges of RDSO and RITES will be borne by the Contractor. *In case of Change of Inspection from RDSO/RITES to RVNL/Consignee,1% of cost of material to be deducted by RVNL ,as Inspection Charges.*

2.4.2.8. Items included in the list of items to be inspected by RDSO & RITES and are not inspected by RDSO/RITES for any reason whatsoever and will be inspected by the Authorized Representatives of RVNL. The following conditions will apply:

i) Material conforming to RDSO specn/drg is procured from RDSO approved source.

ii) Contractor shall submit Manufacturer's Guarantee Certificate for the material.

iii) All such cases where change in agency of inspection other than mentioned in the schedule is required will be processed for specific approval of competent authority.

2.4.3. **OHE Works:** DELETED

2.4.4. **Procurement, storage and reconciliation of materials:**

2.4.4.1. Procurement of Track, S&T and Electrical Items has to be planned by the contractor in consultation with the Engineer.

Procurement Plan should be prepared in such a manner that those materials which have a shelf life like relays etc may be procured in a staggered manner so that the materials are used before its properties get modified with age. The procurement of materials shall be planned as per the milestone/key activities specified in pursuance to GCC clause 8.3. If the material/product does not remain of required specifications at the time of its actual use, the same will be replaced by the contractor with materials conforming to Specifications at his own cost.

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

(i) **Procurement Schedule:**

SN	Items	Schedule
1	Supply of items under S&T BOQ	To facilitate formation work, Cables, Wires Location Boxes, Terminals, Level Crossings and other associated items required for replacement/shifting of existing cables/location box/level crossing etc to the extent of 20% of BOQ quantity may be procured at the beginning. In case more than 20% is required to be procured at the beginning it should be procured with the approval of CPM/GM/GGM in charge of S&T works in consultation with the CPM in-charge. The procurement of remaining quantities should be done after preparation of drawings and designs by the contractor and approval of the same by GGM/GM/AGM in-charge of S&T portion of the work.

(ii) Based on the above schedule, the contractor shall prepare BOQ Schedule/Bill-wise procurement plan and submit a statement in the following format for the information of the Engineer and Employer:

Procurement Plan- Installment No.1				
BOQ Bill No:				
Item No.	Description	BOQ Quantity	Quantity planned for procurement	Justification for placing order for procurement (lead, likely month of execution/installation)

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

Contractor

In case t*he Engineer has some suggestion/observation the same should be conveyed back to the contractor within 7 working days from receipt of the procurement plan. In case no suggestion/observation is received by the contractor within 7 working days, the contractor shall place the orders as per plan submitted by him. If any suggestion/observation is received within 7 working days and the contractor does not agree with the*

suggestion/observations of the Engineer both of them should jointly discuss with the Employer (concerned GM/CPM) and resolve the matter within next 3 days.

(iii) Procurement of materials in subsequent instalments: For procurement of materials in subsequent installment(s), the contractor shall enclose along with his proposal, a review statement of consumption already made or likely to be made in respect of materials already procured in the following format:

Review of the materials procured up to Previous Installment					
BOQ Bill No:					
Item No.	Description	Quantity procured upto previous Installment	Quantity Consumed/ installed	Balance Quantity	Remark

Considering the consumption and further targets, second installment of materials may be procured

Contractor

2.4.4.2. If the Contractor is required to purchase certain material(s) from firms in the approved list of RDSO/Zonal Railways /RVNL, as per terms and conditions of the contract, then the Contractor shall place orders accordingly on firms appearing in the approved list, as specified, on the date of placing the order and provide details of such orders placed to RVNL.

In case the contractor places an order on an approved firm, but the firm is subsequently de-listed before the supply is completed, then in such cases, if there are any outstanding orders on the de-listed firm, then wherever the balance delivery period is available , the extent of supply made by the firm within the original delivery period, shall be accepted provided it passes the inspection of RITES/RDSO/inspecting authority specified in the contract. If the de-listed firm fails to deliver the material within the original delivery period, no extension shall be granted by the Contractor to such firms after date of issue of de-listing order. In case where delivery period has expired, no extension shall be granted and all such orders shall be cancelled and a fresh purchase action should be taken.

2.4.4.3. The plant and materials etc. so procured for the works shall be properly stored on Site and protected against loss, damage or deterioration. For this purpose, the contractor shall make necessary arrangements of store godown/fenced area at site in Railway land as per directions of Engineer.

In case the contract is terminated, the Employer shall have the right to take possession of the godown/store and reasonable cost of such store/godown shall be determined by the Engineer and included in the Final Payment Certificate.

2.4.4.4. **Reconciliation of materials**: After commissioning of each section, material reconciliation is to be taken up for the materials procured under the contract as well as materials issued free of cost by the Employer, and is to be completed within 3 months of commissioning of such section. Similarly, final reconciliation of material for the entire contract shall be taken up on commissioning of the last section under the contract and to be completed within 6 months of commissioning of last section. In case of failure to adhere to the time lines by either party, other party should bring it to the notice of defaulting party in writing under intimation to the Executive Director In-charge of the project. On receipt of such intimation the Executive Director shall take appropriate action as deemed fit by him.

2.5 CODES & SPECIFICATIONS:

2.5.1. The works shall be carried out as per Standard Specifications of Rail Vikas Nigam Limited, which can be obtained on payment. Wherever reference is made in the Contract to specific standards and codes to be met by the goods and materials to be furnished and work performed or tested the provisions of the latest current edition or revision of the relevant standards and codes in effect shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relate to a particular country or region, other authoritative standards which ensure an equal or higher quality than the standards and codes specified will be accepted subject to the Engineer's prior review and written approval. Difference between the standards specified and the proposed alternative standards must be fully described in writing by the Contractor and submitted to the Engineer at least 28 days prior to the date when the Contractor desires the Engineer's approval. In the event the Engineer determines that such proposed deviations do not ensure equal or higher quality, the Contractor shall comply with the standards specified in the documents.

2.5.2. All goods and materials to be incorporated in the goods be new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided for otherwise in the contract.

(a) The Standard Specifications of Rail Vikas Nigam Limited and the list of codes and manuals given in the annexure thereof shall be prime governing.
(b) Where there is conflict between provisions in IRS & IS specifications, provisions in IRS specifications shall prevail.
(c) Where there is no provision of specifications in IRS, provisions in IS specifications should be adopted. Where there are no provisions in IRS and IS Specifications, provisions in IRC Specifications should be followed.
(d) For items not covered in IRS/IS/IRC specifications, BS-5400 Part 1 to 10 may also be considered.

(e) The decision of Engineer shall be final and binding in the interpretation of the clause of the codes of practice and specifications of this tender and no claim whatsoever shall be entertained on this account from the Contractor.

2.6. SURVEY AND FIXING WORKING BENCH MARKS AND ALIGNMENT MARKERS

2.6.1. The work of conducting survey and fixing bench marks and alignment markers before the start of any work on this tender is included in the works covered by the present Tender.

2.7. Bench Marks:

2.7.1. Bench mark of S&T works in the subject contract are set in reference to Engineering Scale Plan (ESP) and Signal Interlocking Plan (SIP) which are forming part of this tender document. The contractor along with the Engineer should verify the details of these bench marks in the first instance, soon after taking possession of the site. If any mistakes are detected in details of these bench marks, then same should be indicated to the Engineer. The mistakes detected should be corrected in consultation with the Engineer. These corrections should be got approved by the Engineer before starting of works related with these details.

2.8. Alignment:

2.8.1. All along the length of the proposed New line at a intervals of about half a kilometer, alignment reference pillars have been set up by the Employer; in addition five reference pillars have been erected for each of the curves to indicate the start & end of the overall length of the curve and its circular portion and apex, by the Employer. This has been done to facilitate setting of the alignment of the proposed line. The contractor along with the Engineer should verify the details of these alignment pillars, soon after taking possession of the site. If any mistakes are detected in the details as given in ESP/SIP, the same should be indicated to the Engineer before starting any work related with that. These detected mistakes should be corrected by the Contractor in consultation with the Engineer. These corrections should be got approved from the Engineer.

2.8.2. While executing the work, on the completed earth work in formation for fixing up the alignment of the signalling and telecom installations, reference bench marks and installed P. Way structure should also be kept in view.

2.8.3. Similarly, the rail levels of track, both in the block sections and the yards, forms reference markers for the level of Signalling & Telecom installations.

2.9. Responsibility for establishing and maintaining working bench marks and alignment markers

DELETED

2.10. Issue of materials by Employer:

2.10.1. The rates quoted by the contractor for supply of materials forming part of

permanent assets shall be deemed to include the cost of supply and transportation to the location of final laying, including storage, watch and ward, multiple handlings, thefts, damages etc., Only the actual quantity of materials forming part of permanent assets will only be considered for payment.

2.11. INTERFACING AND INTEGRATION OF WORKS

2.11.1. As a part of provision of new BG *line between Indore and Budni* the work of providing road bed viz., earthwork & bridges, facilities like construction of station buildings, quarters, platforms, cover over platforms, foot over bridges, water supply, Signalling, electrification and installation of track works are being executed by different Agencies. The interfacing for the purpose of integration of works between the various agencies, or between the Contractor and his sub-contractors will arise. This has to be kept in view.

2.11.2. Land is available throughout the section for carrying out the works.

2.11.3. The site for collection of materials is readily available. In any case, no additional payment will be made for either crossing of tracks or for extra arrangements to ensure safety while crossing the tracks for carting materials.

2.11.4. The contractor shall take full responsibility in terms of organizing, managing, coordinating and administrating the interfacing of all components of works including all issues related to and arising out of such tasks and responsibility. The contractor shall interface with all concerned authorities and other contractors as required to complete the work satisfactorily within the stipulated period.

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

2.11.6. It is the intention of the Employer that the overall interfacing, planning, scheduling, logistic administration inclusive of necessary logistic planning and all tasks that are necessary to guarantee proper co-ordination and

proper interfacing of all activities during the complete execution of the works, is clearly understood and agreed to. Integrated programme shall set out in detail how the different contractors will work together in execution of the works. It shall also spell out the overall interfacing, planning, scheduling, logistic administration inclusive of necessary logistic planning and all tasks that are necessary to guarantee proper co-ordination and proper interfacing of the different activities by various agencies during the execution of the works. A master schedule incorporating the milestone of works completion by each contractor shall be included in the integrated programme to demonstrate the capability of all parties involved in the completion of the works. The essence of the integrated programme shall be that the contractors have both overall responsibility for the completeness and the timeliness of all the works and quality of the contractual works within the agreed time frame. Allowance need to be made by the contractors in their resources and pricing to ensure that proper co-ordination of the various items is incorporated in their contract.

2.11.7. Needless to say that commissioning of this New line project requires close coordination among various agencies executing the works in this section, Engineer, Employer and the Railway authorities. The contractor shall therefore plan all his works requiring interfacing, like works in mid-section, station yards, with other agencies, meticulously, in consultation and coordination with all concerned parties, in advance, for expeditious execution, without causing any delay either to his works or those of others.

2.11.8. The contractor shall strictly adhere to the work plan made for works requiring interfacing. Any delay either on his part or on the part of other agencies and other bottlenecks that could affect the pace of works shall be informed to the Engineer in time so as to enable him to take corrective steps.

2.11.9. If, in the opinion of Engineer, any delay in execution of any part of the Project requiring interfacing is attributable to the failures of the contractor to take adequate steps for smooth execution of such works, then the Engineer shall have the right to take necessary steps to organize and streamline such works, including excluding the requisite portion of work from the scope of the Contractor and getting the same executed by other agencies, at the risk and cost of the contractor.

2.12. Damages to property:

The contractor shall organize all his activities so as not to cause any damage to the property of Railway or that of other agencies or any third party. In spite of taking all precautions, in the unfortunate event of any damage to the property, then the contractor shall not only indemnify the Employer of the claims made by the affected parties but also settle the matters with the affected parties as per law. If the nature of damage is one of that affecting the train movements or causing a safety hazard to the public, then the situation will be treated as an emergency and the Engineer reserves the right to take all necessary steps as deemed necessary to restore train operations or to remove the hazardous situation or to mitigate the damage, at the risk and cost of the contractor.

2.13. SURVEY EQUIPMENTS

The contractor should provide the survey equipment and other accessories as per the instructions of Engineer as and when required. He should also provide all necessary help as required by the Engineer for checking the works, whenever required.

2.14. **Co-ordinate with the concerned State government/local Authorities:**
If any requirement arises, the Contractor shall co-ordinate with the concerned State government/local Authorities and strictly adhere to the instructions specified by them while executing the works. The entire work shall be planned in advance and submitted to the Engineer for approval. The Contractor shall provide adequate resources as per the approved plan to complete the work as per programme.

2.15. All power requirements for execution of works shall be arranged by the Contractor from his own resources. Subject to availability of power, the Employer/Engineer will recommend to the Railway Authorities for providing power connection. The Contractor shall bear the cost of installation and payment of necessary charges for providing such power connections as per the Terms and Conditions of the Railway.

2.16. The Contractor shall hand over all released materials arising out of modifications to the respective Authorities and no separate payment will be made for loading, leading, transporting etc.

Chapter – 3

SITE FACILITIES FOR THE EMPLOYER AND THE ENGINEER

3.1 GENERAL

The Contractor shall provide for the use of the Employer / Engineer office accommodation, equipment, communication & drawing facilities throughout the course of the work and for such period of time during the defects liability period as the employer & Engineer may require, The details of the accommodation & the other facilities are detailed below: All the facilities under this clause will continue to be maintained by the Contractor free of cost till the defect liability period is over. Thereafter the Contractor shall dismantle the building and take away all the materials, office furniture, & equipment etc which will be the property of the Contractor. The provisions of the site facilities will be paid for separately.

3.2 SITE OFFICES: Deleted

3.3 FURNITURE AND OTHER OFFICE EQUIPMENT: Deleted

3.4 TRANSPORT

3.4.1 **General :** Deleted

3.5 OFFICE MAINTENANCE

3.5.1 Deleted

3.5.2 Deleted

3.6 EQUIPMENT FOR USE OF THE ENGINEER :- Deleted

3.7 Documentation

A complete set of documentation will be supplied with each System. The documentation should be self-tutorial in nature and be readily understood by non-computer personnel. The following manuals will be supplied with the system:

(a) Manual on how to operate the equipment; and

(b) Manual on how to use the facilities and software provided by the supplier (including languages and utilities).

4.0 SPECIFICATIONS

4.1.1 Following Standard Specifications for Materials and Works of Rail Vikas Nigam Ltd.

Separate priced booklet containing Rail Vikas Nigam Ltd.'s Standard Specifications for Materials and Works in Volume-1 (Civil) and Volume – II (Electrical) are available in the office of Rail Vikas Nigam Ltd. and bidders may obtain the same. The booklet is also available on RVNL's website www.rvnl.org.

It is presumed that bidders have gone through Rail Vikas Nigam Ltd.'s Standard Specifications for Materials and works (Civil, Electrical and Signalling and Telecommunication) including latest correction slips issued up to the date 28 days prior to the deadline for submission of bids before quoting the rates.

4.2 TECHNICAL SPECIFICATION FOR CONSTRUCTION OF SERVICE & RESIDENTIAL BUILDINGS

Deleted

4.2.1 Technical Specifications common to all type of buildings :

Deleted

4.2.2 Technical Specifications Specific to S&T/Electrical and office buildings:

Deleted.

5.0 Personnel

The minimum number of personnel for the key positions with requisite qualification and experience as envisaged for execution of the work are as mentioned hereunder. However, the deployment of personnel shall be decided from time to time as per mutually agreed program. In order to achieve the desired progress as per mutually agreed program, the actual requirement of personnel over and above the minimum has to be assessed by the contractor and deployed accordingly.

S. No.	Key Position	Minimum No. of Personnel	Qualification	Minimum Experience In Similar Work [years]
1	Project Manager	1	Graduate/ Diploma in Electrical/Electronics/ Communication Engg. OR a combination of basic streams of Electrical/ Electronics/ Communication Engg.	10 years, out of which 3 years in-charge of S&T Railway project (for Graduate). 16 years, out of which 3 years in-charge of S&T Railway project (for Diploma).
2	Sr. Engineers i) for Earth work	N.A		
	ii) for Bridges	N.A		
	iii) P Way	N.A		
	iv) S&T	1	Degree/ Diploma in Electrical/Electronics/ Communication Engg. OR a combination of basic streams of Electrical/ Electronics/ Communication Engg.	Experience in Signaling - 3 Years (for Graduate) 7 years for Diploma
	v) OHE (for projects with RE) / General Electrical works (GS) (for projects without RE)	N.A		
3	Technicians/Supervisors	N.A.		
	(a) Earthwork			

S. No.	Key Position	Minimum No. of Personnel	Qualification	Minimum Experience In Similar Work [years]
	(b) Bridges			
	(c) P Way			
	(d) Buildings & Platform			
4	Technicians/Supervisors S&T	3	Minimum Diploma in Electrical / Electronics/ Communication Engineering OR a combination of basic streams of Electrical/ Electronics/ Communication Engg.	5 years
5	Technicians/Supervisors OHE	N.A.		
6	Surveyor for setting out Lines and levels periodically.	N.A.		
7	Material Testing Engineer	N.A.		
8	Liaison Manager for liaison with Govt. Dept. and local bodies.	N.A.		
9	Safety Officer	N.A.		
10	Quality Officer	N.A.		
11	Material Manager	N.A.		
12	Draftsman with knowledge of AutoCAD			
	(a) Civil Engineering	N.A.		

S. No.	Key Position	Minimum No. of Personnel	Qualification	Minimum Experience In Similar Work [years]
	(b) S&T	1	Minimum Diploma in Electrical/ Electronics/ Communication Engineering OR a combination of basic streams of Electrical/ Electronics/ Communication Engg.	3 years
	(c) OHE	N.A		

Note:

1. Project Manager is to be deployed within 30 days of issue of Letter of Acceptance. The program for deployment of other personnel shall be mutually decided, keeping in view the agreed program, and shall be conveyed by PMC/Employer. The personnel shall be deployed within 30 days of the stated requirement. In case of failure to deploy any personnel within 30 days of the stated requirement, a penalty shall be imposed for each day of delay as under:

a. Rs 10000 per person per day for Project Manager & Safety Officer.
b. Rs 5000 per person per day for Sr. Engineers; Quality Assurance Specialist/ Quality Officer
c. Rs 3000 per person per day for other personnel.

2. On completion/likely completion of activities concerned to a particular personnel, demobilization of that personnel shall be requested by the Contractor at least 30 days in advance and demobilization shall be done with the approval of PMC/Employer only. In case demobilization is done without approval of PMC/Employer, the penalty mentioned in note (1) above, as relevant, shall be imposed for each day of absence of the personnel.
3. The professional qualification requirement can be relaxed by GM(S&T) in case of ex-Railway man who has worked in Signalling and Telecommunication Engineering department of Railway /PSU (Like RVNL/RITES/ IRCON) in a position of Gazetted officer /Sr.Manager & above for Sr Engineer (S&T) / Junior Engineer /Sr.Technician or above for Supervisor (S&T) and has relevant experience not less than that prescribed for minimum professional qualification.
4. The professional qualification requirement and experience requirement can be relaxed by concerned CPM/GM Incharge of the contract, if the contractor submits a request with the undertaking that the personnel being proposed is highly competent to perform the required functions and the CPM/GM incharge of the contract is satisfied that the proposed personnel is having enough experience and technical competence to perform the required functions. The performance of such personnel shall be reviewed by the concerned CPM/GM in charge after a period of 3 months and in case performance is

found satisfactory, the personnel may be allowed to continue or if the performance is found otherwise, the contractor shall be asked to replace the personnel within next one month.

6.0 Equipment

The minimum number of equipment envisaged for execution of the work are as mentioned hereunder. However, the deployment of equipment shall be decided from time to time as per mutually agreed program. In order to achieve the desired progress as per mutually agreed program, the actual requirement of equipment over and above the minimum has to be assessed by the contractor and deployed accordingly.

S.No.	Equipment Type and Characteristics	Min. Number Required
Equipment type and characteristics for S & T		
1.	Portable Generators of all capacities as per site requirement	2 Nos.
2.	Drilling machines of all type as per site requirement	2 Nos
3.	Track Drilling machines of all type (mechanical cycle chain type and electrical type) as per site requirement	2 Nos
4.	Grinders of all types as per site requirement	2 Nos.
5.	Jacks for cable Laying	2 Sets
6.	Concrete Shutters for Apparatus case full	2 Sets
7.	Concrete Shutters for Apparatus case half	2 Sets
8.	Concrete Shutters for Signal Post	1 Sets
9.	Concrete Shutters for Shunt Signal	1 Sets
10.	Tool Kits for fitters – Mechanical Installation gang (Location Box / Apparatus cases, Signals, etc.)	02 Sets
11.	Tool kit for fitters – Electro-mechanical gang (Track circuiting, Point machines, Axle counters, Circuits controllers, Level locks & relay Rack equipment.)	02 Sets
12.	Tool kit for locking fitters cum LC gate interlocking. Key lock point interlocking & ground level frame interlocking.	1 Sets
13.	Wireman's tool kit consisting of Multimeter, Meggar, Box spanner, Nose Plier, Holding Plier, buzzer, wooden hammer, Clamp type ampere meter etc.	04 Sets
14.	Carpenter tool kit	1 Sets
15.	Earth tester	1 Set
16.	Torches	8 Nos.
17.	Material loaders / Mini trucks /Matadors / Bolero's	2 Sets
Equipment type and characteristics for OHE		Nil

Note:

1. The type of equipment specified can be changed by the Engineer depending upon suitability of the equipment as per site conditions with the approval of CPM concerned subject to the following;

(i) The total rate of production/output of proposed number and type of equipment should be equal to or more than that of the number and type of equipment stipulated in the contract agreement and quality of work is not compromised in any way;

(ii) Eligibility and Qualification Criteria (EQC) in the bid document did not include any past experience criteria of execution of a key activity with the use of particular type of equipment proposed to be changed;

(iii) Higher rates for works were not justified in the estimate or BOQ on account of use of particular type of equipment proposed to be changed;

7.0 BID DRAWINGS

For Drawings, Special feature of Project Area, Scheduling of Work and Methodology ESPs, SIPs etc. are available in employer's office and can be seen / obtained CD/Pen drive on any working day as mentioned in BDS. These plans may change during execution and are to be referred for guidance purpose only. These shall not form part of the Bid and Contract agreement.

PART III

Conditions of Contract and Contract Forms

Section 6

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General Conditions

1. General Provisions

1.1 Definitions In the Conditions of Contract ("these Conditions"), which include Special Conditions of Contract, Parts A and B, and these General Conditions, the following words and expressions shall have the meanings stated. Words indicating persons or parties include corporations and other legal entities, except where the context requires otherwise.

1.1.1 The Contract

1.1.1.1 "**Contract**" means the Contract Agreement, the Letter of Acceptance, the Letter of Bid, these Conditions, the Specification, the Drawings, the Schedules, and the further documents (if any) which are listed in the Contract Agreement or in the Letter of Acceptance.

1.1.1.2 "**Contract Agreement"** means the contract agreement (*if any*) **referred** to in Sub-Clause 1.6 [Contract Agreement].

1.1.1.3 **"Letter of Acceptance**" means the letter of formal acceptance, signed by the Employer, of the Letter of Bid, including any annexed memoranda comprising agreements between and signed by both Parties. If there is no such letter of acceptance, the expression "Letter of Acceptance" means the Contract Agreement and the date of issuing or receiving the Letter of Acceptance means the date of signing the Contract Agreement.

1.1.1.4 **"Letter of Bid"** means the document entitled letter of bid, which was completed by the Contractor and includes the signed offer to the Employer for the Works.

1.1.1.5 **"Specification**" means the document entitled specification, as included in the Contract, and any additions and modifications to the specification in accordance with the Contract. Such document specifies the Works.

1.1.1.6 **"Drawings"** means the drawings of the Works, as included in the **Contract**, and any additional and modified drawings issued by (or on behalf of) the Employer in accordance with the Contract.

1.1.1.7 **"Schedules"** means the document(s) entitled schedules, completed by the Contractor and submitted with the Letter of Bid, as included in the Contract. Such document may include the Bill of Quantities, data, lists, and schedules of rates and/or prices.

1.1.1.8 **"Bid/Tender"** means the Letter of Technical Bid **and**Letter of Price Bid and all other documents which the Contractor submitted with the Letter of Technical Bid and Letter of Price Bid , as included in the Contract.

1.1.1.9 **"Bill of Quantities"** and **"Daywork Schedule**" and "Schedule of Payment Currencies" mean the documents so named (if any)

which are comprised in the Schedules.

1.1.1.10 "Contract Data" means the pages completed by the Employer entitled contract data which constitute Part A of the Special Conditions of Contract.

1.1.1.11 "Employer's Requirements" means the document entitled 'Employer's Requirements' as part of Works Requirements and as included in the Contract, and any additions and modifications to such document in accordance with the Contract. Such document specifies the purpose, scope, and/or design and/or other technical criteria, for the works.

1.1.2 Parties and Persons

1.1.2.1 **"Party"** means the Employer or the Contractor, as the context requires.

1.1.2.2 **"Employer"** means the person named as employer in the Contract Data and the legal successors in title to this person.

1.1.2.3 **"Contractor"** means the person(s) named as contractor in the Letter of Bid accepted by the Employer and the legal successors in title to this person(s).

1.1.2.4 **"Engineer"** means the person nominated by the Employer to act as the Engineer for the purposes of the Contract and named in the Contract Data, or other person appointed from time to time by the Employer and notified to the Contractor under Sub-Clause 3.4 [Replacement of the Engineer]. The person nominated to act as an engineer may be an employee of Rail Vikas Nigam Ltd (RVNL) or an employee of a Project Management Consultancy firm engaged by RVNL for project management as per the discretion of the Employer.

1.1.2.5 **"**Contractor's **Representative"** means the person named by the Contractor in the Contract or appointed from time to time by the Contractor under Sub-Clause 4.3 [Contractor's Representative], who acts on behalf of the Contractor.

1.1.2.6 "Employer's **Representative"** means the person named by the Employer in the Contract or appointed from time to time by the Employer who acts on behalf of the Employer.

1.1.2.7 **"Employer's Personnel"** means the Engineer, the assistants referred to in Sub-Clause 3.2 [Delegation by the Engineer] and all other staff, labour and other employees of the Engineer and of the Employer; and any other personnel notified to the Contractor, by the Employer or the Engineer, as Employer's Personnel.

1.1.2.8 **"Contractor's Personnel"** means the Contractor's Representative and all personnel whom the Contractor utilises on Site, who may include the staff, labour and other employees of the Contractor and of each Subcontractor; and any other personnel assisting the Contractor in the execution of the Works.

1.1.2.9 **"**Subcontractor**"** means any person named in the Contract as a subcontractor, or any person appointed as a subcontractor, for a part of the Works; and the legal successors in title to each of these persons.

1.1.3 Dates, Tests, Periods and Completion

1.1.3.1 **"Base Date"** means the date 28 days prior to the deadline for submission of bids.

1.1.3.2 **"**Commencement **Date**" means the date notified under Sub-Clause 8.1 [Commencement of Works].

1.1.3.3 **"Time for Completion"** means the time for completing the Works or a Section (as the case may be) under Sub-Clause 8.2 [Time for Completion], as stated in the Contract Data (with any extension under Sub-Clause 8.4 [Extension of Time for Completion]), calculated from the Commencement Date.

1.1.3.4 **"Tests on Completion"** means the tests which are specified in the Contract or agreed by both Parties or instructed as a Variation, and which are carried out under Clause 9 [Tests on Completion] before the Works or a Section (as the case may be) are taken over by the Employer.

1.1.3.5 **"Taking-Over Certificate"** means a certificate issued under Clause 10 [Employer's Taking Over].

1.1.3.6 **"Tests after Completion"** means the tests (if any) which are specified in the Contract and which are carried out in accordance with the Specification after the Works or a Section (as the case may be) are taken over by the Employer.

1.1.3.7 **"Defects Notification Period"** means the period for notifying defects in the Works or a Section (as the case may be) under Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects], as stated in the Contract Data (with any extension under Sub-Clause 11.3 [Extension of Defects Notification Period]), calculated from the date on which the Works or Section is completed as certified under Sub-Clause 10.1 [Taking Over of the Works and Sections].

1.1.3.8 "Performance Certificate" means the certificate issued under Sub-Clause 11.9 [Performance Certificate].

1.1.3.9 "**Day"** means any (working or non-working) calendar day from 00:00 hrs. to 24:00 hrs.

1.1.3.10 **"Months"** means any calendar month of the Gregorian calendar year.

1.1.3.11 **"Year"** means 365 days

1.1.3.12 "**Time** Periods" Any reference to time period commencing "from" the specified day or date "till" or "until" a specified day shall

include both such days.

1.1.3.13 Any reference to **"Time"** shall be according to Indian Standard Time (IST).

1.1.4 Money and Payments

1.1.4.1 "**Accepted Contract Amount"** means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects. In the Letter of Acceptance, the Accepted Contract Amount shall have two components i.e. (i) the base amount excluding GST (ii) GST component (calculated at the rate for works contract service as per GST Laws).

1.1.4.2 **"Contract Price"** means the price defined in Sub-Clause 14.1 [The Contract Price], and includes adjustments in accordance with the Contract.

1.1.4.3 **"Cost"** means all expenditure reasonably incurred (or to be incurred) by the Contractor, whether on or off the Site, including overhead and similar charges, but does not include profit.

1.1.4.4 **"Final** Payment **Certificate"** means the payment certificate issued under Sub-Clause 14.13 [Issue of Final Payment Certificate].

1.1.4.5 **"Final Statement"** means the statement defined in Sub-Clause 14.11 [Application for Final Payment Certificate].

1.1.4.6 **"Foreign Currency"** means a currency in which part (or all) of the Contract Price is payable, but not the Local Currency.

1.1.4.7 **"Interim Payment Certificate**" means a payment certificate issued under Clause 14 [Contract Price and Payment], other than the Final Payment Certificate.

1.1.4.8 **"Local Currency"** means the currency in Indian Rupees.

1.1.4.9 **"Payment Certificate"** means a payment certificate issued under Clause 14 [Contract Price and Payment].

1.1.4.10 **"Provisional Sum"** means a sum (if any) which is specified in the Contract as a provisional sum, for the execution of any part of the Works or for the supply of Plant, Materials or services under Sub-Clause 13.5 [Provisional Sums].

1.1.4.11 **"Retention Money"** means the accumulated retention moneys which the Employer retains under Sub-Clause 14.3 [Application for Interim Payment Certificates] and pays under Sub-Clause 14.9 [Payment of Retention Money].

1.1.4.12 "Statement" means a statement submitted by the Contractor as part of an application, under Clause 14 [Contract Price and Payment], for a payment certificate.

1.1.5 Works and Goods

1.1.5.1 **"Contractor's Equipment**" means all apparatus, machinery, vehicles and other things required for the execution and

completion of the Works and the remedying of any defects. However, Contractor's Equipment excludes Temporary Works, Employer's Equipment (if any), Plant, Materials and any other things intended to form or forming part of the Permanent Works.

1.1.5.2 **"Goods"** means Contractor's Equipment, Materials, Plant and Temporary Works, or any of them as appropriate.

1.1.5.3 **"Materials"** means things of all kinds (other than Plant) intended to form or forming part of the Permanent Works, including the supply-only materials (if any) to be supplied by the Contractor under the Contract.

1.1.5.4 **"Permanent Works"** means the permanent works to be executed by the Contractor under the Contract.

1.1.5.5 **"Plant"** means the apparatus, machinery and vehicles intended to form or forming part of the Permanent Works.

1.1.5.6 **"Section**" means a part of the Works specified in the Contract Data as a Section (if any).

1.1.5.7 **"Temporary Works"** means all temporary works of every kind (other than Contractor's Equipment) required on Site for the execution and completion of the Permanent Works and the remedying of any defects.

1.1.5.8 "Works" mean the Permanent Works and the Temporary Works, or either of them as appropriate.

1.1.6 Other Definitions

1.1.6.1 **"Contractor's** Documents" means the calculations, computer programs and other software, drawings, manuals, models and other documents of a technical nature (if any) supplied by the Contractor under the Contract.

1.1.6.2 **"Country**" means India, the country in which the Site (or most of it) is located, where the Permanent Works are to be executed.

1.1.6.3 **"Employer's Equipment**" means the apparatus, machinery and vehicles (if any) made available by the Employer for the use of the Contractor in the execution of the Works, as stated in the Specification; but does not include Plant which has not been taken over by the Employer.

1.1.6.4 **"Force Majeure**" is defined in Clause 19 [Force Majeure].

1.1.6.5 **"Laws"** means all national (or state) legislation, statutes, ordinances and other laws, and regulations and by-laws of any legally constituted public authority.

1.1.6.6 **"Performance Security**" means the security (or securities, if any) under Sub-Clause 4.2 [Performance Security].

1.1.6.7 **"Site"** means the places where the Permanent Works are to be executed and to which Plant and Materials are to be delivered, and any other places as may be specified in the Contract as forming part of the Site.

1.1.6.8 **"Unforeseeable**" means not reasonably foreseeable and against which adequate preventive precautions could not reasonably be taken by an experienced contractor by the date for submission of the Bid.

1.1.6.9 "Variation" means any change to the Works, which is instructed or approved as a variation under Clause 13 [Variations and Adjustments].

1.1.6.10 **"Railway"** means a railway, or any portion of a railway for public carriage of passengers and goods as defined in the Railways ACT 1989. Any reference to railway means the Indian Railways and the respective Zonal Railway

1.2 Interpretation- In the Contract, except where the context requires otherwise:

(a) words indicating one gender include all genders;

(b) words indicating the singular also include the plural and words indicating the plural also include the singular;

(c) provisions including the word "agree," "agreed" or "agreement" require the agreement to be recorded in writing;

(d) "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record; and

(e) the word "tender" is synonymous with "bid", and "tenderer" with "bidder" and the words "tender documents" with "bidding documents"

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

In these Conditions, provisions including the expression "Cost plus profit" require this profit to be one twentieth (5%) of this Cost unless otherwise indicated in the Contract Data.

1.3 Communications Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices, requests and discharges, these communications shall be:

(a) in writing and delivered by hand (against receipt), sent by mail or courier, or transmitted using any of the agreed systems of electronic transmission as stated in the Contract Data; and

(b) delivered, sent or transmitted to the address for the recipient's communications as stated in the Contract Data. However:

(i) if the recipient gives notice of another address, communications shall thereafter be delivered accordingly; and

(ii) if the recipient has not stated otherwise when requesting an approval or consent, it may be sent to the address from which the request was issued.

Approvals, certificates, consents and determinations shall not be unreasonably withheld or delayed. When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other

Party or the Engineer, a copy shall be sent to the Engineer or the other Party, as the case may be.

1.4 Law and Language

The Contract shall be governed by the law of the country or other jurisdiction stated in the Contract Data.

The ruling language of the Contract shall be that stated in the Contract Data.

The language for communications shall be that stated in the Contract Data. If no language is stated there, the language for communications shall be the ruling language of the Contract.

1.5 Priority of Documents

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

(a) the Contract Agreement (if any),

(b) the Letter of Acceptance,

(c) the Letter of bid,

(d) the Schedules (including Priced Bill of Quantities),

(e) Special Conditions of Contract:

  (i) Part A – Contract Data

  (ii) Part B - Specific Provisions

(f) the General Conditions of Contract

(g) Works/Employer's Requirements,

(h) the Drawings,

(i) any other documents forming part of the Contract including minutes of pre-bid meeting.

If an ambiguity or discrepancy is found in the documents, the Engineer shall issue any necessary clarification or instruction.

1.6 Contract Agreement

The Parties shall enter into a Contract Agreement within 28 days after the Contractor receives the Letter of Acceptance, unless they agree otherwise. The Contract Agreement shall be based upon the form annexed to the Special Conditions of Contract. The costs of stamp duties and similar charges (if any) imposed by law in connection with entry into the Contract Agreement shall be borne by the Employer.

1.7 Assignment

Neither Party shall assign the whole or any part of the Contract or any benefit or interest in or under the Contract. However, either Party:

(a) may assign the whole or any part with the prior agreement of the other Party, at the sole discretion of such other Party, and

(b) may, as security in favour of a bank or financial institution, assign its right to any moneys due, or to become due, under the Contract.

1.8 Care and Supply of Documents

The Specification and Drawings shall be in the custody and care of the Employer. Unless otherwise stated in the Contract, two copies of the Contract and of each subsequent Drawing shall be supplied to the Contractor, who may make or request further copies at the cost of the Contractor.

Each of the Contractor's Documents shall be in the custody and care of the Contractor, unless and until taken over by the Employer. Unless otherwise stated in the Contract, the Contractor shall supply to the Engineer six copies of each of the Contractor's Documents.

The Contractor shall keep, on the Site, a copy of the Contract, publications named in the Specification, the Contractor's Documents (if any), the Drawings and Variations and other communications given under the Contract. The Employer's Personnel shall have the right of access to all these documents at all reasonable times.

If a Party becomes aware of an error or defect in a document which was prepared for use in executing the Works, the Party shall promptly give notice to the other Party of such error or defect.

1.9 Delayed Drawings or Instructions

The Contractor shall give notice to the Engineer whenever the Works are likely to be delayed or disrupted if any necessary drawing or instruction is not issued to the Contractor within a particular time, which shall be reasonable. The notice shall include details of the necessary drawing or instruction, details of why and by when it should be issued, and details of the nature and amount of the delay or disruption likely to be suffered if it is late.

If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Engineer to issue the notified drawing or instruction within a time which is reasonable and is specified in the notice with supporting details, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

(b) payment of any such Cost , which shall be included in the Contract Price.

After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

However, if and to the extent that the Engineer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be entitled to such extension of time, Cost or profit

1.10 Employer's Use of Contractor's Documents

As between the Parties, the Contractor shall retain the copyright and other intellectual property rights in the Contractor's Documents and other design documents made by (or on behalf of) the Contractor.

The Contractor shall be deemed (by signing the Contract) to give to the Employer a non-terminable transferable non-exclusive royalty-free licence to copy, use and communicate the Contractor's Documents, including making and using modifications of them. This licence shall:

(a) apply throughout the actual or intended working life (whichever is longer)

of the relevant parts of the Works,

(b) entitle any person in proper possession of the relevant part of the Works to copy, use and communicate the Contractor's Documents for the purposes of completing, operating, maintaining, altering, adjusting, repairing and demolishing the Works, and

(c) in the case of Contractor's Documents which are in the form of computer programs and other software, permit their use on any computer on the Site and other places as envisaged by the Contract, including replacements of any computers supplied by the Contractor.

The Contractor's Documents and other design documents made by (or on behalf of) the Contractor shall not, without the Contractor's consent, be used, copied or communicated to a third party by (or on behalf of) the Employer for purposes other than those permitted under this Sub-Clause.

1.11 Contractor's Use of Employer's Documents

As between the Parties, the Employer shall retain the copyright and other intellectual property rights in the Specification, the Drawings and other documents made by (or on behalf of) the Employer. The Contractor may, at his cost, copy, use, and obtain communication of these documents for the purposes of the Contract. They shall not, without the Employer's consent, be copied, used or communicated to a third party by the Contractor, except as necessary for the purposes of the Contract.

1.12 Confidential Details

The Contractor shall disclose all such confidential and other information as the Engineer may reasonably require in order to verify the Contractor's compliance with the Contract.

The Contractor shall treat the details of the Contract as private and confidential, except to the extent necessary to carry out the Contractor's obligations under the Contract or to comply with applicable Laws. The Contractor shall not publish or disclose any particulars of the Works without the previous agreement of the Employer. However, the Contractor shall be permitted to disclose any publicly available information, or information otherwise required to establish his qualifications to compete for other projects.

1.13 Compliance with Laws

The Contractor shall, in performing the Contract, comply with applicable Laws. Unless otherwise stated in the Special Conditions of Contract:

(a) the Employer shall have obtained (or shall obtain) the planning, zoning or similar permission for the Permanent Works, and any other permissions described in the Specification as having been (or being) obtained by the Employer; and the Employer shall indemnify and hold the Contractor harmless against and from the consequences of any failure to do so; and

(b) the Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licences and approvals, as required by the Laws in relation to the execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so.

1.14 Joint and Several Liability

If the Contractor constitutes (under applicable Laws) a joint venture of two or more persons/firms:

(a) these persons shall be deemed to be jointly and severally liable to the Employer for the performance of the Contract;

(b) these persons shall notify the Employer of their leader who shall have authority to bind the Contractor and each of these persons; and

(c) the Contractor shall not alter its composition or legal status without the prior consent of the Employer.

(d) In the event of default by any partner of joint venture, on or after achieving 25% of the financial progress (excluding advance if any) the lead partner or remaining partner(s), in case the defaulting partner is the lead partner, shall notify the Employer within twenty eight (28) days of the occurrence and within Fifty six (56) days of the said notification, the lead partner or remaining partner(s), who are not the defaulting partner, shall assign the works of the defaulting partner, to equally competent party with prior consent of the Employer. For this purpose the term “equally competent party” shall mean as under:

> “The new JV partner replacing the defaulting partner should meet the EQC requirement of package/combination of packages which was met by the defaulting partner on the basis of which the original tender was awarded.”

The replacement of any defaulting partner, with the new partner shall be subject to the condition that the new partner has to submit additional performance security equal to 10% of balance cost of work of the JV partner being replaced. The performance security submitted by the defaulting partner shall also continue with RVNL till satisfactory completion of the work.

(e) Notwithstanding the consent of the Employer for change in composition or legal status of the joint venture the partners shall continue to be jointly and severally liable to the Employer.

(f) The joint venture shall enter into a joint venture agreement incorporating the provisions of sub-paras (a) to (e) based upon the form annexed to the Conditions of Contract. The JV agreement shall indicate precisely the specific role of all members of

the JV in respect of planning, design, construction equipment, key personnel, work execution, and financing of the project. The authority to sign the agreement shall be evidenced by approved legal instruments.

Notwithstanding the contents of the sub-clauses above, if the performance of any JV partner is not found satisfactory by the Employer, in respect of the responsibilities assigned to him as per JV agreement which is a part of this agreement, the Employer may issue notice of such default to the said JV partner or the JV (depending upon reasons of default) and declare the said JV partner or the JV as Poor Performer. The issue of such notice shall automatically debar the JV partner or JV as the case may be from participating in any RVNL tender from the date of issue of notice of default.

1.15 Inspections by the Employer

The Contractor shall permit the Employer and/or persons appointed by the Employer to inspect the Site and/or the Contractor's records relating to the performance of the Contract.

2. The Employer

2.1 Right of Access to the Site

The Employer shall give the Contractor right of access to, and possession of, all parts of the Site within the time (or times) stated in the Contract Data. The right and possession may not be exclusive to the Contractor. If, under the Contract, the Employer is required to give (to the Contractor) possession of any foundation, structure, plant or means of access, the Employer shall do so in the time and manner stated in the Specification. However, the Employer may withhold any such right or possession until the Performance Security has been received.

If no such time is stated in the Contract Data, the Employer shall give the Contractor right of access to, and possession of, the Site within such times as may be required to enable the Contractor to proceed in accordance with the programme submitted under Sub-Clause 8.3 [Programme].

If the Contractor suffers delay as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall give notice to the Engineer and shall be entitled to:

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

(b) new rates in terms of clause 12.3.1 (c) .

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

However, if and to the extent that the Employer's failure was caused by any error or delay by the Contractor, including an error in, or delay in the submission of, any of the Contractor's Documents, the Contractor shall not be

entitled to such extension of time or new rates.

2.2 Permits, Licenses or Approvals

The Employer shall (where he is in a position to do so) provide reasonable assistanceto the Contractor at the request of the Contractor:

(a) by obtaining copies of the Laws of the Country which are relevant to the Contract but are not readily available, and

(b) for the Contractor's applications for any permits, licences or approvals required by the Laws of the Country:

(i) which the Contractor is required to obtain under Sub-Clause 1.13 [Compliance with Laws],

(ii) for the delivery of Goods, including clearance through customs, and

(iii) for the export of Contractor's Equipment when it is removed from the Site.

2.3 Employer's Personnel

The Employer shall be responsible for ensuring that the Employer's Personnel and the Employer's other contractors on the Site:

(a) co-operate with the Contractor's efforts under Sub-Clause 4.6 [Co-operation], and

(b) take actions similar to those which the Contractor is required to take under sub-paragraphs (a), (b) and (c) of Sub-Clause 4.8 [Safety Procedures] and under Sub-Clause 4.18 [Protection of the Environment].

2.4 Employer's Financial Arrange-ments

The Employer has sourced the funds to finance the project.

2.5 Employer's Claims

If the Employer considers himself to be entitled to any payment under any Clause of these Conditions or otherwise in connection with the Contract, and/or to any extension of the Defects Notification Period, the Employer or the Engineer shall give notice and particulars to the Contractor. However, notice is not required for payments due under Sub-Clause 4.19 [Electricity, Water and Gas], under Sub-Clause 4.20 [Employer's Equipment and Free-Issue Material], or for other services requested by the Contractor.

The notice shall be given as soon as practicable after the Employer became aware, or should have become aware, of the event or circumstances giving rise to the claim. A notice relating to any extension of the Defects Notification Period shall be given before the expiry of such period.

The particulars shall specify the Clause or other basis of the claim, and shall include substantiation of the amount and/or extension to which the Employer considers himself to be entitled in connection with the Contract.

The Engineer shall then proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the amount (if any) which the Employer is entitled to be paid by the Contractor, and/or (ii) the extension (if any) of the Defects Notification Period in accordance with Sub-Clause 11.3 [Extension of Defects Notification Period].

This amount may be included as a deduction in the Contract Price and Payment Certificates. The Employer shall only be entitled to set off against or make any deduction from an amount certified in a Payment Certificate, or to otherwise claim against the Contractor, in accordance with this Sub-Clause.

3. The Engineer

3.1 Engineer's Duties and Authority

The Employer shall appoint the Engineer who shall carry out the duties assigned to him in the Contract. The Engineer's staff shall include suitably qualified engineers and other professionals who are competent to carry out these duties.

The Engineer shall have no authority to amend the Contract.

The Engineer may exercise the authority attributable to the Engineer as specified in or necessarily to be implied from the Contract.

However, the Engineer shall obtain the specific approval of the Employer before taking action under the-following Sub-Clauses of these Conditions:

(a) Sub-Clause 4.12-Unforeseeable Physical Conditions: Agreeing o determining an extension of time and/or additional cost.

(b) Sub-Clause 8.4-Extension of Time for Completion: Agreeing o determining extension of time.

(c) Sub-Clause 11.9-Performance Certificate: Issue of Performance Certificate.

(d) Sub-Clause 13.1-Instructing a Variation: Except,

i) in an emergency situation as determined by the Engineer and as amplified in sub-paras (h) and (i) below, or

ii) for other situations, if the variation in quantity of any item does not exceed 25% of the stipulated quantity in the agreement, the variation in quantity in such item does not result in increase in excess of 0.1% of contract price and variation in quantity in such item does not result in cumulative variation in contract price in excess of 2%.

(e) Sub-Clause 13.3-Variation Procedure: Approving a proposal for Variation submitted by the Contractor in accordance with Sub Clause 13.1 or 13.2.

(f) Sub-Clause 13.4-Payment in applicable Currencies: Specifying the amount payable in each of the applicable currencies for a Variation.

(g) Clause 20.1: Contractor Claims for extension of time and/or additional payment.

(h) Notwithstanding the obligation, as set out above, to obtain approval, if, in the opinion of the Engineer, an emergency occurs affecting the safety of life or of the Works or of adjoining property, he may, without relieving the Contractor of any of his duties and responsibility under the Contract, instruct the Contractor to execute all such work or to do all such things as may, in the opinion of the Engineer, be necessary to abate or reduce the risk. The Contractor shall forthwith comply, despite the absence of

approval of the Employer, with any such instruction of the Engineer. The Engineer shall determine an addition to the Contract Price, in respect of such instruction, in accordance with Clause 13 and shall notify the Contractor accordingly, with a copy to the Employer.

(i) In case the emergency mentioned in above Sub-paras occurs on account of failure of Contractor, by way of not adhering to the approved scheme of work or not taking adequate safety precautions or by any other reason attributable to the contractor, then no additional amounts shall be paid to the Contractor for attending to such emergencies and the Contractor shall be liable for Employer's claims.

(j) Sub-clause 4.4 regarding deployment of Sub-Contractors.

3.2 Delegation by the Engineer

The Engineer may from time to time assign duties and delegate authority to assistants, and may also revoke such assignment or delegation. These assistants may include a resident engineer, and/or independent inspectors appointed to inspect and/or test items of Plant and/or Materials. The assignment, delegation or revocation shall be in writing and shall not take effect until copies have been received by both Parties.

However, unless otherwise agreed by both Parties, the Engineer shall not delegate the authority to determine any matter in accordance with Sub-Clause 3.5 [Determinations].

Assistants shall be suitably qualified persons, who are competent to carry out these duties and exercise this authority, and who are fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language].

Each assistant, to whom duties have been assigned or authority has been delegated, shall only be authorised to issue instructions to the Contractor to the extent defined by the delegation. Any approval, check, certificate, consent, examination, inspection, instruction, notice, proposal, request, test, or similar act by an assistant, in accordance with the delegation, shall have the same effect as though the act had been an act of the Engineer. However:

(a) any failure to disapprove any work, Plant or Materials shall not constitute approval, and shall therefore not prejudice the right of the Engineer to reject the work, Plant or Materials;

(b) if the Contractor questions any determination or instruction of an assistant, the Contractor may refer the matter to the Engineer, who shall promptly confirm, reverse or vary the determination or instruction.

3.3 Instructions of the Engineer

The Engineer may issue to the Contractor (at any time) instructions and additional or modified Drawings which may be necessary for the execution of the Works and the remedying of any defects, all in accordance with the Contract. The Contractor shall only take instructions from the Engineer, or from an assistant to whom the appropriate authority has been delegated under this Clause. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

The Contractor shall comply with the instructions given by the Engineer or delegated assistant, on any matter related to the Contract. Whenever

practicable, their instructions shall be given in writing. If the Engineer or a delegated assistant,

(a) gives an oral instruction and

(b) receives a written confirmation of the instruction, from (or on behalf of) the Contractor, within two working days after giving the instruction, and

(c) does not reply by issuing a written rejection and/or instruction within two working days after receiving the confirmation,

(d) then the confirmation shall constitute the written instruction of the Engineer or delegated assistant (as the case may be).

3.4 Replacement of the Engineer Notwithstanding Sub-Clause 3.1, if the Employer intends to replace the Engineer, the Employer shall, not less than 21 days before the intended date of replacement, give notice to the Contractor of the name, address and relevant experience of the replacement Engineer.

3.5 Determinations Whenever these Conditions provide that the Engineer shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the Engineer shall consult with each Party in an endeavour to reach agreement. If agreement is not achieved, the Engineer shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.

The Engineer shall give notice to both Parties of each agreement or determination, with supporting particulars. Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [Claims, Disputes and Arbitration].

4. The Contractor

4.1 Contractor's General Obligations The Contractor shall design (to the extent specified in the Contract), execute and complete the Works in accordance with the Contract and with the Engineer's instructions, and shall remedy any defects in the Works.
The Contractor shall provide the Plant and Contractor's Documents specified in the Contract, and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of defects.
All equipment, and material, to be incorporated in or required for the Works shall be procured from approved sources as stipulated in the Contract.

The Contractor shall be responsible for the adequacy, stability and safety of all Site operations and of all methods of construction. Except to the extent specified in the Contract, the Contractor (i) shall be responsible for all Contractor's Documents, Temporary Works, and such design of each item of Plant and Materials as is required for the item to be in accordance with the Contract, and (ii) shall not otherwise be responsible for the design or specification of the Permanent Works.
The Contractor shall, whenever required by the Engineer, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this having previously been notified to the

Engineer.

On completion of the works, the contractor shall arrange to furnish to the Employer two (2) bound sets of all "As Built" drawings for every component of the Works at his own cost, all such copies being on Polyester film of quality to be approved by the Engineer or his Representative. The Taking – over Certificate of the Works, as per the provisions of Clause 10.1 herein, shall not be issued by the Engineer in the event of the Contractor's failure to furnish the aforesaid "As Built" drawings for the entire works.

If the Contract specifies that the Contractor shall design any part of the Permanent Works, then unless otherwise stated in the Special Conditions of Contract:

(a) the Contractor shall submit to the Engineer the Contractor's Documents for this part in accordance with the procedures specified in the Contract;

(b) these Contractor's Documents shall be in accordance with the Specification and Drawings, shall be written in the language for communications defined in Sub-Clause 1.4 [Law and Language], and shall include additional information required by the Engineer to add to the Drawings for co-ordination of each Party's designs;

(c) the Contractor shall be responsible for this part and it shall, when the Works are completed, be fit for such purposes for which the part is intended as are specified in the Contract; and

(d) prior to the commencement of the Tests on Completion, the Contractor shall submit to the Engineer the "as-built" documents and operation and maintenance manuals in accordance with the Specification and in sufficient detail for the Employer to operate, maintain, dismantle, reassemble, adjust and repair this part of the Works. Such part shall not be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections] until these documents and manuals have been submitted to the Engineer.

4.2 Performance Security

The Contractor shall obtain (at his cost) a Performance Security and an additional Performance Security, if any in terms of ITB 35.5, for proper performance of the contract, for the amount, currencies and validity period for Performance Security stated in the Contract Data. If an amount is not stated in the Contract Data, this Sub-Clause shall not apply.

The Contractor shall deliver the Performance Security and additional Performance Security, if any, to the Employer within 28 days after receiving the Letter of Acceptance, and shall send a copy to the Engineer. The Performance Security/additional Performance Security shall be issued by an entity and from within a country (or other jurisdiction) approved by the Employer, and shall be in the form as given in Section 8 (Contract Forms) or in another form specifically approved by the Employer.

The Performance Security/additional Performance Security shall be, at the Contractor's option, in any of the following forms:

(i) An unconditional Bank guarantee/e-Bank Guarantee in the

prescribed format

(ii) A Pay Order / Demand Draft drawn on a Scheduled / Nationalized Bank in India in favour of "Rail Vikas Nigam Ltd" payable at New Delhi

(iii) FDR in favour of "Rail Vikas Nigam Ltd." (free from any encumbrance).

(iv) A deposit of cash or online bank transfer to RVNL account

(v) Insurance Surety Bond issued by a creditor / insurance company acceptable to the Employer.

The bank guarantee/e-Bank Guarantee shall be from a bank having minimum net-worth of over INR 500 million from the specified banks as under:

(i) a Schedule Bank in India, or

(ii) a Foreign Bank having their operations in India, or

(iii) a Foreign Bank which does not have operations in India is required to provide a counter-guarantee by State Bank of India,

In case the contractor is a JV;" the Performance Security/additional Performance Security, if any in terms of ITB 35.5, shall be submitted by each JV Partner separately on behalf of the JV in favour of RVNL in proportion of their respective percentage share specified in the JV Agreement. The additional Performance Security shall be submitted by the partner(s) responsible for execution of schedule(s) (as per JV agreement) against which additional Performance Security is required to be submitted in terms of ITB 35.5. However, Submission of Performance Guarantee Security by individual partners on behalf of the JV shall in no way dilute their Joint & Several responsibility. The Employer shall be entitled to recover the amount of Bank Guarantees /e-Bank Guarantee/Insurance Surety Bond individually and all the Partners jointly at its discretion."

The Contractor shall ensure that the Performance Security/additional Performance Security is valid and enforceable until the Contractor has executed and completed the Works and remedied defects, if any. If the contractor does not complete the work for any reasons whatsoever, the terms of the Performance Security/ additional Performance Security specify its expiry date, and the Contractor has not become entitled to receive the Performance Certificate by the date 28 days prior to the expiry date,

the Contractor shall be bound to extend the validity of the Performance Security/additional Performance Security until the Works have been completed and any defects have been remedied.

The Guarantees shall be unconditional and irrevocable. The Employer shall return the Performance Security to the Contractor within 21 days after receiving a copy of the Performance Certificate or passing of the Final Payment Certificate whichever is later. However, on completion of specified section(s)

and successful passage of defect liability period for such section(s) along with execution of any leftover works at the time of completion of such section(s), the contractor shall be entitled for release of 90% of the proportionate Performance Security calculated as specified in Contract Data subject to the condition that Engineer certifies that no recoveries are pending in the contract. In case Engineer points out amount to be recovered then the contractor shall be entitled for release of 90% of the proportionate Performance Security calculated as specified in Contract Data minus the amount to be recovered.

The Employer shall return additional Performance Security submitted in terms of ITB 35.5 as per the following;

(a) If the contractor submits an application stating that all the works against the particular schedule(s)/bill(s) for which additional Performance Security was submitted in terms of ITB 35.5 have been completed in all respect, then the Employer, on being satisfied with the claim of the contractor, shall return the full additional Performance Security against the particular schedule(s). Decision of the Employer regarding completion of works against a particular schedule/bill shall be final and binding on the contractor.

(b) If the contractor submits an application stating that majority of the works (physical progress being not less than 90%) against the particular schedule(s)/bill(s) for which additional Performance Security was submitted in terms of ITB 35.5 have been completed and execution of balance works is held up for reasons not attributable to the Contractor, then the Employer, on being satisfied with the claim of the contractor, shall return 75% of the amount of additional Performance Security against the particular schedule(s). The balance amount of additional Performance Security shall however be returned only after completion of the works against the particular schedule(s)/bill(s) for which additional Performance Security was submitted in terms of ITB 35.5, in all respects to the satisfaction of the Employer. Decision of the Employer regarding completion of works against a particular schedule/bill shall be final and binding on the contractor.

Without limitation to the provisions of the rest of this Sub-Clause, whenever the Engineer determines an addition or a reduction to the Contract Price as a result of a change in cost and/or legislation or as a result of a Variation amounting to more than 25 percent of the portion of the Contract Price payable in a specific currency, the Contractor shall at the Engineer's request promptly submit Performance Guarantee @ specified in the contract data of the increased amount over the original contract price in a specific currency. On the other hand if the value of contract price decreases by more than 25% of the original contract price payable in a specific currency, Performance Guarantee @ specified in the contract data of the decrease in contract price from the original contract price in a specific currency shall be returned to the contractor, on his request.

Wherever the contract is terminated under Clause 15.2, the Performance Guarantee shall be encashed by the Employer:

i) taken in terms of sub clause 35.5 of ITB and not due for release on the date of issue of termination letter in terms of this clause, in case of termination of the contract as a whole;

Or

ii) at the discretion of the Employer it may be encashed in part/parts proportionate to the Contract price of the bill/schedule to which the terminated part of work belongs i.e P=(A x B)÷C where

P=Proportionate Bank Guarantee/e-Bank Guarantee/ Insurance Surety Bond Amount.

A=Contract price of the particular bill/schedule to which the terminated part of work belongs.
B=Performance Guarantee amount in terms of GCC sub clause 4.2.
C=Total Contract price.

Plus additional performance Guarantee amount, if any, taken in terms of sub clause 35.5 of ITB and not due for release on the date of issue of termination letter in terms of this clause against this particular bill/schedule to which the terminated part of the work belongs, in case of termination in part/parts.

The balance work should be got done separately, and independently by RVNL without risk and cost of the original contractor. The original 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 would be debarred from participating in the tender for the balance work either in his/her individual capacity or as a partner of any other JV/partnership firm.

In case the contractor fails to perform the contract or any JV partner fails to perform its obligations under the JV agreement, which is a part of this agreement, the Employer may issue notice of such default to the said JV partner or the JV (depending upon reasons of default) and declare the said JV partner or the JV as Poor Performer. The issue of such notice shall automatically debar the JV partner or JV, as the case may be, from participating in any RVNL tender from the date of issue of notice of default. The relevant performance security including additional performance security, if any, in terms of sub clauses 35.5 of ITB submitted by the Contractor or submitted on behalf of JV partner to the extent not due for release at the time of contemplation of such action shall be encashed and forfeited either fully or in proportion of the percentage share of that partner in the JV agreement, as the case may be.

4.3 Contractor's Representative

The Contractor shall appoint the Contractor's Representative and shall give him all authority necessary, including financial powers, to act on the Contractor's behalf under the Contract.

Unless the Contractor's Representative is named in the Contract, the Contractor shall, prior to the Commencement Date, submit to the Engineer for consent the name and particulars of the person the Contractor proposes to appoint as Contractor's Representative. If consent is withheld or subsequently revoked, or if the appointed person fails to act as Contractor's Representative, the Contractor shall similarly submit the name and particulars of another suitable person for such appointment.

The Contractor shall not, without the prior consent of the Engineer, revoke the appointment of the Contractor's Representative or appoint a replacement.

The whole time of the Contractor's Representative shall be given to directing the Contractor's performance of the Contract. If the Contractor's Representative is to be temporarily absent from the Site during the execution of the Works, a suitable replacement person shall be appointed, subject to the Engineer's prior consent, and the Engineer shall be notified accordingly.

The Contractor's Representative shall, on behalf of the Contractor, receive instructions under Sub-Clause 3.3 [Instructions of the Engineer].

The Contractor's Representative may delegate any powers, functions and authority to any competent person, and may at any time revoke the delegation. Any delegation or revocation shall not take effect until the Engineer has received prior notice signed by the Contractor's Representative, naming the person and specifying the powers, functions and authority being delegated or revoked.

The Contractor's Representative shall be fluent in the language for communications defined in Sub-Clause 1.4 [Law and Language]. If the Contractor's Representative's delegates are not fluent in the said language, the Contractor shall make competent interpreters available during all working hours in a number deemed sufficient by the Engineer.

The Contractor shall depute his Representative to attend all the review meetings notified by the Engineer

4.4 Sub-contractors

The Contractor shall not subcontract the whole of the Works. The Contractor shall be responsible for the acts or defaults of any Subcontractor, his agents or employees, as if they were the acts or defaults of the Contractor.

Unless otherwise stated in the Special Conditions of Contract:

(a) the Contractor shall not be required to obtain consent to suppliers solely of Materials, or to a subcontract for which the Subcontractor is named in the Contract or as specifically provided in the Contract data or value of any sub-contract for Works, or the aggregate value of such sub-contracts with any Subcontractor, does not exceed 5% (five per cent) of the Contract Price provided that such works are not for the key

activities in terms of clause 2.6 of section 3 (Evaluation and Qualification Criteria) which are to be executed by specialist subcontractor(s);

(b) the prior consent of the Engineer shall be obtained to other proposed Subcontractors and/or suppliers. While submitting his proposal in this regard, the Contractor shall ensure that;

(i) total value of Works requiring such consent for subcontracting shall not be more than 70% (seventy per cent) of the Contract Price;

(ii) the proposed subcontractor must have executed woks of 40% of value of the proposed subcontract through a single contract during last seven years; and

(iii) No banning/blacklisting/declaration as poor performer by RVNL is in force on the proposed subcontractor (on the date of grant of consent by the Engineer);

(iv) No contract of the proposed subcontractor has been terminated by RVNL during the last two years (to be reckoned from the date of grant of consent by the Engineer);

(v) the Contractor shall submit the proposal for subcontracting with the name, particulars and the relevant experience of the proposed subcontractor;

(c) the Contractor shall give the Engineer not less than 28 days' notice of the intended date of the commencement of each Subcontractor's work, and of the commencement of such work on the Site;

(d) each subcontract shall include provisions which would entitle the Employer to require the subcontract to be assigned to the Employer under Sub-Clause 4.5 [Assignment of Benefit of Subcontract] (if or when applicable) or in the event of termination under Sub-Clause 15.2 [Termination by Employer]; and

(e) On getting consent from the Engineer, the Contractor shall provide to the Engineer copy of the agreement entered with such subcontractor.

The Contractor shall ensure that the requirements imposed on the Contractor by Sub-Clause 1.12 [Confidential Details] apply equally to each Subcontractor.

Where practicable, the Contractor shall give fair and reasonable opportunity for contractors from the Country to be appointed as Subcontractors.

The Contractor shall endeavour to resolve all matters and payments amicably and speedily with the sub-contractors.

The Contractor shall indemnify and hold the Employer harmless against and from any claim of subcontractors or suppliers of the materials.

The Contractor shall release payment to the Sub-contractors/Suppliers promptly and shall endeavour to resolve all issues amicably and speedily with the Sub-contractors/Suppliers, so that the execution of work is not affected in any

manner whatsoever.

In case a Sub-contractor/Supplier represents to the Engineer in writing with supporting documents, stating that he has not received payment due as per the agreement/work or purchase order for the works executed by such Sub-contractor or supplies made by such Supplier, which have been covered in previous Payment Certificates and the Engineer finds such representation having merit, the Engineer, before issuing next Payment Certificate, may forward a copy of the representation to the Contractor requesting the Contractor to supply reasonable evidence that the amount stated to be outstanding by the Sub-contractor/Supplier for the works executed or supplies made, which have been covered in previous Payment Certificates has been paid and if not, why the same is not payable. The Engineer may recommend to make payment to the Sub-contractor/Supplier unless the Contractor submits reasonable evidence to the Engineer:

(i) that the amount claimed has been paid, or

(ii) satisfying the Engineer in writing that the Contractor is entitled to withhold or that the amount is not payable.

On the recommendation of the Engineer, the Employer may (at his sole discretion) directly pay to the Sub-contractor/Supplier the amount due for and on behalf of the Contractor, part or all of such amounts previously certified (less applicable deductions) as are found due to the Sub-contractor/Supplier by the Engineer. The Employer shall adjust the amount paid directly to the Sub-contractor/Supplier from any amount due by it to the Contractor. The Contractor shall repay the amount, in case no amount is found due by the Employer to the Contractor.

That the payment by Employer, on behalf of the Contractor to its Sub-contractor/Supplier, shall not alter any terms of agreement between the Employer and the Contractor and nor the same shall result in any privity of contract between the Employer and the Sub-contractor/Supplier.

4.5 Assignment of Benefit of Subcontract

If a Subcontractor's obligations extend beyond the expiry date of the relevant Defects Notification Period and the Engineer, prior to this date, instructs the Contractor to assign the benefit of such obligations to the Employer, then the Contractor shall do so. Unless otherwise stated in the assignment, the Contractor shall have no liability to the Employer for the work carried out by the Subcontractor after the assignment takes effect.

4.6 Co-operation

The Contractor shall, as specified in the Contract or as instructed by the Engineer, allow appropriate opportunities for carrying out work to:

(a) the Employer's Personnel,

(b) any other contractors employed by the Employer, and

(c) the personnel of any legally constituted public authorities,

who may be employed in the execution on or near the Site of any work not

included in the Contract.

Any such instruction shall constitute a Variation if and to the extent that it causes the Contractor to incur Unforeseeable Cost. Services for these personnel and other contractors may include the use of Contractor's Equipment, Temporary Works or access arrangements which are the responsibility of the Contractor.

If, under the Contract, the Employer is required to give to the Contractor possession of any foundation, structure, plant or means of access in accordance with Contractor's Documents, the Contractor shall submit such documents to the Engineer in the time and manner stated in the Specification.

4.7 Setting Out

The Contractor shall set out the Works in relation to original points, lines and levels ofreference specified in the Contract or notified by the Engineer. The Contractor shall be responsible for the correct positioning of all parts of the Works, and shall rectify any error in the positions, levels, dimensions or alignment of the works, notifying the Engineer within 28 days of the date of commencement

In the event of such discrepancy arising during the course of the work, for which Employer's documents are handed over after the date of commencement, the contractor shall seek clarifications within 14 days of receipt of such documents

The Employer shall be responsible for any errors in these specified or notified items of reference, but the Contractor shall use reasonable efforts to verify their accuracy before they are used.

Contractor shall promptly notify the Employer and the Engineer of any error, omission, fault, or any other defect in the design, drawing or specifications for the works, which he discovers when reviewing the Contract Documents, and in the process of execution of the Works. The contractor shall be responsible to ensure correlation in various drawings and bill of quantities, before commencement and execution of work. In case of any discrepancy the contractor shall bring it to notice of the Engineer for clarification within 28 days of the issue of Letter of Acceptance. In the event of such discrepancy arising during the course of the work, for which drawings are given after the date of issue of Letter of Acceptance, the contractor shall seek clarifications within 14 days of receipt of such drawings.

4.8 Safety Procedures

The Contractor shall follow the provisions laid down in Annexure 1 to Section 7 (Special Conditions of Contract), Chapter 1. (Safety and Security) of Section 5 (Works/Employers Requirements) and shall:

(a) comply with all applicable safety regulations,

(b) take care for the safety of all persons entitled to be on the Site,

(c) use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to these persons,

(d) provide fencing, lighting, guarding and watching of the Works until completion and taking over under Clause 10 [Employer's Taking Over],

and

(e) provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and of owners and occupiers of adjacent land.

4.8.1 Notwithstanding with any other provision, the Contractor shall have to pay penalty for damage to Railway cable in terms of clause C 15 of the JPO as given in para 1.2 of Chapter 1. (Safety and Security) of Section 5 (Works/Employers Requirements) and shall also indemnify the Employer against any losses, damages to property or life in terms of para 1.11 and 1.12 of the chapter 1. (Safety and Security) of Section 5 (Works/Employers Requirements).

4.9 Quality Assurance

The Contractor shall institute a quality assurance system to demonstrate compliance with the requirements of the Contract. The system shall be in accordance with the details stated in the Contract. The Engineer shall be entitled to audit any aspect of the system.

Details of all procedures and compliance documents shall be submitted to the Engineer for information before each design and execution stage is commenced. When any document of a technical nature is issued to the Engineer, evidence of the prior approval by the Contractor himself shall be apparent on the document itself.

Compliance with the quality assurance system shall not relieve the Contractor of any of his duties, obligations or responsibilities under the Contract.

4.10 Site Data

The Employer shall have made available to the Contractor for his information, prior to the Base Date, all relevant data in the Employer's possession on sub-surface and hydrological conditions at the Site, including environmental aspects. The Employer shall similarly make available to the Contractor all such data which come into the Employer's possession after the Base Date. The Contractor shall be responsible for interpreting all such data.

To the extent which was practicable (taking account of cost and time), the Contractor shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Bid or Works. To the same extent, the Contractor shall be deemed to have inspected and examined the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Bid as to all relevant matters, including (without limitation):

(a) the form and nature of the Site, including sub-surface conditions,

(b) the hydrological and climatic conditions,

(c) the extent and nature of the work and Goods necessary for the execution and completion of the Works and the remedying of any defects,

(d) the Laws, procedures and labour practices of the Country, and

(e) the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.

(f) Data made available by the Employer in accordance with the preceding paragraph shall be deemed to include data listed elsewhere in the contract as open for inspection at the address stipulated in the Contract.

4.11 Sufficiency of the Accepted Contract Amount

The Contractor shall be deemed to:

(a) have satisfied himself as to the correctness and sufficiency of the Accepted Contract Amount, and

(b) have based the Accepted Contract Amount on the data, interpretations, necessary information, inspections, examinations and satisfaction as to all relevant matters referred to in Sub-Clause 4.10 [Site Data].

Unless otherwise stated in the Contract, the Accepted Contract Amount covers all the Contractor's obligations under the Contract (including those under Provisional Sums, if any) and all things necessary for the proper execution and completion of the Works and the remedying of any defects.

4.12 Unforeseeable Physical Conditions

In this Sub-Clause, "physical conditions" means natural physical conditions and man-made and other physical obstructions and pollutants, which the Contractor encounters at the Site when executing the Works, including sub-surface and hydrological conditions but excluding climatic conditions.

If the Contractor encounters adverse physical conditions which he considers to have been Unforeseeable, the Contractor shall give notice to the Engineer as soon as practicable.

This notice shall describe the physical conditions, so that they can be inspected by the Engineer, and shall set out the reasons why the Contractor considers them to be Unforeseeable. The Contractor shall continue executing the Works, using such proper and reasonable measures as are appropriate for the physical conditions, and shall comply with any instructions which the Engineer may give. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.

If and to the extent that the Contractor encounters physical conditions which are Unforeseeable, gives such a notice, and suffers delay and/or incurs Cost due to these conditions, the Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

(b) payment of any such Cost, which shall be included in the Contract Price.

After receiving such notice and inspecting and/or investigating these physical conditions, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) whether and (if so) to what extent these physical conditions were Unforeseeable, and (ii) the matters described in sub-paragraphs (a) and (b) above related to this extent.

However, before additional Cost is finally agreed or determined under sub-paragraph (ii), the Engineer may also review whether other physical conditions in similar parts of the Works (if any) were more favourable than could reasonably have been foreseen when the Contractor submitted the Bid. If and to the extent that these more favourable conditions were encountered, the

Engineer may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the reductions in Cost which were due to these conditions, which may be included (as deductions) in the Contract Price and Payment Certificates. However, the net effect of all adjustments under sub-paragraph (b) and all these reductions, for all the physical conditions encountered in similar parts of the Works, shall not result in a net reduction in the Contract Price.

The Engineer may take account of any evidence of the physical conditions foreseen by the Contractor when submitting the Bid, which may be made available by the Contractor, but shall not be bound by any such evidence.

4.13 Rights of Way and Facilities

The Contractor shall bear all costs and charges for special and/or temporary rights-of-way which he may require, including those for access to the Site. The Contractor shall also obtain, at his risk and cost, any additional facilities outside the Site which he may require for the purposes of the Works.

In case any operation connected with traffic necessitates diversion, obstruction or closure of any road, railway or any other right of way, the approval of the Engineer and the concerned authorities shall be obtained well in advance by the Contractor.

Provided that if it is found necessary for the Contractor to move one or more loads of heavy constructional plants and equipment, materials or Pre-constructed units or parts of units of work over roads, highways, bridges on which such oversized and overweight items that are not normally to be moved, the contractor shall obtain prior permission from the concerned authorities.

Payments for complying with the requirements, if any, for protection or strengthening of the roads, highways or bridges shall be made by the contractor and such expenses shall be deemed to be included in his quoted contract price.

4.14 Avoidance of Interference

The Contractor shall not interfere unnecessarily or improperly with:

(a) the convenience of the public, or

(b) the access to and use and occupation of all roads and footpaths, irrespective of whether they are public or in the possession of the Employer or of others or

(c) Passenger amenities at stations and station platforms.

The Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from any such unnecessary or improper interference.

4.15 Access Route

The Contractor shall be deemed to have been satisfied as to the suitability and availability of access routes to the Site. The Contractor shall use reasonable efforts to prevent any road or bridge from being damaged by the Contractor's traffic or by the Contractor's Personnel. These efforts shall include the proper use of appropriate vehicles and routes.

Except as otherwise stated in these Conditions:

(a) the Contractor shall (as between the Parties) be responsible for any

maintenance which may be required for his use of access routes;

(b) the Contractor shall provide all necessary signs or directions along access routes, and shall obtain any permission which may be required from the relevant authorities for his use of routes, signs and directions;

(c) the Employer shall not be responsible for any claims which may arise from the use or otherwise of any access route;

(d) the Employer does not guarantee the suitability or availability of particular access routes; and

(e) Costs due to non-suitability or non-availability, for the use required by the Contractor, of access routes shall be borne by the Contractor.

4.16 Transport of Goods

Unless otherwise stated in the Special Conditions of Contract:

(a) the Contractor shall give the Engineer not less than 21 days' notice of the date on which any Plant or a major item of other Goods will be delivered to the Site;

(b) the Contractor shall be responsible for packing, loading, transporting, receiving, unloading, storing and protecting all Goods and other things required for the Works; and

(c) the Contractor shall indemnify and hold the Employer harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from the transport of Goods, and shall negotiate and pay all claims arising from their transport.

4.17 Contractor's Equipment

The Contractor shall be responsible for all Contractors' Equipment. When brought on to the Site, Contractor's Equipment shall be deemed to be exclusively intended for the execution of the Works. The Contractor shall not remove from the Site any major items of Contractor's Equipment without the consent of the Engineer. However, consent shall not be required for vehicles transporting Goods or Contractor's Personnel off Site.

In the event of Contractor imports any equipment the following shall apply" :

(a) Custom Clearance: The Employer will assist the contractor, when required by furnishing letters of recommendation for obtaining expeditious clearance through customs of constructional plants, material and other things required for the works and then for re-export, if any. The following publications, may be referred to by the contractor for guidance about custom regulations etc :

(i) Import & export policy, together with amendments, if any, published by Govt. of India, Ministry of Commerce..

(j) Hand Book of Procedures, together with amendments, if any, Volume 1 and 2 published by Ministry of Commerce.

(iii) Customs Tariff, together with amendments, if any published by Central Customs.

The Contractor shall be responsible to follow the latest rules and regulations without any liability of the Employer.

(b) Re-export of contractors equipment: The contractor shall obtain all the relevant information regarding procedure for the import and subsequent re-export of his equipment and materials from the Chief Controller of Imports and Exports, New Delhi, and shall inform himself and keep himself informed on the details of custom charges and draw-back regulations as applicable to the items of Constructional plant. The contractor shall provide the necessary guarantee/bonds where these are required by the customs notwithstanding that import licenses may be granted in the name of Employer.

(c) Notwithstanding the provisions mentioned above, Contractor's Equipment, including essential spare parts therefore, imported by the Contractor for the sole purpose of executing the Contract shall be temporarily exempt from the payment of import duties and taxes upon initial importation, provided the Contractor shall post with the customs authorities at the port of entry an approved export bond or bank guarantee, valid until the Time for Completion plus six months, in an amount equal to the full import duties and taxeswhich would be payable on the assessed imported value of such Contractor's Equipment and spare parts, and **callable** in the event the Contractor's Equipment is not exported from the Country on completion of the Contract. A copy of the **bond** or bank guarantee endorsed by the custom authorities shall be provided by the Contractor to the Employer upon the importation of individual items of Contractor's Equipment and spare parts. Upon export of individual items of Contractor's Equipment or spare parts, or upon the completion of the Contract, Contractor shall prepare for approval by the customs authority the authorities, an assessment of the residual value of the Contractor's Equipment and spare parts to be exported based on the depreciation scale(s) and other criteria used by the customs authorities for such purposes under the provisions of the applicable Laws. Import duties and taxes shall be due and payable to the customs authorities by the Contractor on (a) the difference between the initial imported value and the residual value of the contractor's equipment and spare parts to be exported and (b) on the initial imported value that contractor's equipments and spare parts remaining in the Country after completion of the Contract. Upon payment of such dues within 28 days of being invoiced, the bond or bank guarantee shall be reduced or released accordingly; otherwise the security shall be called in the full amount remaining in the Country.

(d) Conditions of hire of the contractor's equipment: A certified copy of the agreement in respect of any item of Equipment held by contractor under any agreement for hire or hire purchase thereof, shall be supplied to the Engineer/Employer."

4.18 Protection of the Environment

The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise and other results of his operations.

The Contractor shall ensure that emissions, surface discharges and effluent from the Contractor's activities shall not exceed the values stated in the Specification or prescribed by applicable Laws.

4.19 Electricity, Water and Gas

The Contractor shall, except as stated below, be responsible for the provision of all power, water and other services he may require.

The Contractor shall be entitled to use for the purposes of the Works such supplies of electricity, water, gas and other services as may be available on the Site and of which details and prices are given in the Specification. The Contractor shall, at his risk and cost, provide any apparatus necessary for his use of these services and for measuring the quantities consumed.

The quantities consumed and the amounts due (at these prices) for such services shall be agreed or determined by the Engineer in accordance with Sub-Clause 2.5 [Employer's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Employer.

4.20 Employer's Equipment and Free-Issue Material

The Employer shall make the Employer's Equipment (if any) available for the use of theContractor in the execution of the Works in accordance with the details, arrangements and prices stated in the Specification. Unless otherwise stated in the Specification:

(a) the Employer shall be responsible for the Employer's Equipment, except that

(b) the Contractor shall be responsible for each item of Employer's Equipment whilst any of the Contractor's Personnel is operating it, driving it, directing it or in possession or control of it.

The appropriate quantities and the amounts due (at such stated prices) for the use of Employer's Equipment shall be agreed or determined by the Engineer in accordance with Sub-Clause 2.5 [Employer's Claims] and Sub-Clause 3.5 [Determinations]. The Contractor shall pay these amounts to the Employer.

The Employer shall supply, free of charge, the "free-issue materials" (if any) in accordance with the details stated in the Contract data. The Employer shall, at his risk and cost, provide these materials at the time and place specified in the Contract. The Contractor shall then visually inspect them, and shall promptly give notice to the Engineer of any shortage, defect or default in these materials. Unless otherwise agreed by both Parties, the Employer shall immediately rectify the notified shortage, defect or default.

In case materials are handed over, in accordance with the procedure prescribed by the Engineer, after proper measurement and accounted for, the contractor shall be solely liable for any shortage, damage, defect or default in such material, and shall indemnify the Employer until the final

accountal of materials is made by the Contractor on completion of the work.

4.21 Progress Reports

Unless otherwise stated in the Special Conditions of Contract, monthly progress reports shall be prepared by the Contractor and submitted to the Engineer in six copies. The first report shall cover the period up to the end of the first calendar month following the Commencement Date. Reports shall be submitted monthly thereafter, each within 7 days after the last day of the period to which it relates.

Reporting shall continue until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

Each report shall include:

- charts and detailed descriptions of progress, including each stage of design (if any), Contractor's Documents, procurement, manufacture, delivery to Site, construction, erection and testing; and including these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),
- photographs showing the status of manufacture and of progress on the Site;
- for the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location, percentage progress, and the actual or expected dates of:
  - (i) commencement of manufacture,
  - (ii) Contractor's inspections,
  - (iii) tests, and
  - (iv) shipment and arrival at the Site;
- the details described in Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment];
- copies of quality assurance documents, test results and certificates of Materials;
- list of notices given under Sub-Clause 2.5 [Employer's Claims] and notices given under Sub-Clause 20.1 [Contractor's Claims];
- safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations; and
- comparisons of actual and planned progress of all activities, with details of any events or circumstances which may jeopardise the completion in accordance with the Contract, and the measures being (or to be) adopted to overcome delays

4.22 Security of the Site

Unless otherwise stated in the Special Conditions of Contract:

(a) the Contractor shall be responsible for keeping unauthorised persons off the Site, and

(b) authorised persons shall be limited to the Contractor's Personnel and the Employer's Personnel; and to any other personnel notified to the Contractor, by the Employer or the Engineer, as authorised personnel of the Employer's other contractors on the Site.

4.23 Contractor's Operations on Site

The Contractor shall confine his operations to the Site, and to any additional areaswhich may be obtained by the Contractor and agreed by the Engineer as working areas. The Contractor shall take all necessary precautions to keep Contractor's Equipment and Contractor's Personnel within the Site and these additional areas, and to keep them off adjacent land.

During the execution of the Works, the Contractor shall keep the Site free from all unnecessary obstruction, and shall store or dispose of any Contractor's Equipment or surplus materials. The Contractor shall clear away and remove from the Site any wreckage, rubbish and Temporary Works which are no longer required.

Upon the issue of a Taking-Over Certificate, the Contractor shall clear away and remove, from that part of the Site and Works to which the Taking-Over Certificate refers, all Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works. The Contractor shall leave that part of the Site and the Works in a clean and safe condition. However, the Contractor may retain on Site, during the Defects Notification Period, such Goods as are required for the Contractor to fulfill obligations under the Contract.

4.24 Fossils

All fossils, coins, articles of value or antiquity, and structures and other remains or items of geological or archaeological interest found on the Site shall be placed under the care and authority of the Employer. The Contractor shall take reasonable precautions to prevent Contractor's Personnel or other persons from removing or damaging any of these findings.

The Contractor shall, upon discovery of any such finding, promptly give notice to the Engineer, who shall issue instructions for dealing with it. If the Contractor suffers delay and/or incurs Cost from complying with the instructions, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

(b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

5. Nominated Subcontractors

5.1 Definition of nominated

In the Contract, "nominated Subcontractor" means a Subcontractor:

Subcontractor

(a) who is stated in the Contract as being a nominated Subcontractor, or

(b) whom the Engineer, under Clause 13 [Variations and Adjustments], instructs the Contractor to employ as a Subcontractor.

5.2 Objection to Nomination

The Contractor shall not be under any obligation to employ a nominated Subcontractor against whom the Contractor raises reasonable objection by notice to the Engineer as soon as practicable, with supporting particulars. An objection shall be deemed reasonable if it arises from (among other things) any of the following matters, unless the Employer agrees to indemnify the Contractor against and from the consequences of the matter:

(a) there are reasons to believe that the Subcontractor does not have sufficient competence, resources or financial strength;

(b) the subcontract does not specify that the nominated Subcontractor shall indemnify the Contractor against and from any negligence or misuse of Goods by the nominated Subcontractor, his agents and employees; or

(c) the subcontract does not specify that, for the subcontracted work (including design, if any), the nominated Subcontractor shall:

(i) undertake to the Contractor such obligations and liabilities as will enable the Contractor to discharge his obligations and liabilities under the Contract, and

(ii) indemnify the Contractor against and from all obligations and liabilities arising under or in connection with the Contract and from the consequences of any failure by the Subcontractor to perform these obligations or to fulfil these liabilities.

5.3 Payments to nominated Subcontractors

The Contractor shall pay to the nominated Subcontractor the amounts which the Engineer certifies to be due in accordance with the subcontract. These amounts plus other charges shall be included in the Contract Price in accordance with sub-paragraph (b) of Sub-Clause 13.5 [Provisional Sums], except as stated in Sub-Clause 5.4 [Evidence of Payments].

5.4 Evidence of Payments

Before issuing a Payment Certificate which includes an amount payable to a nominated Subcontractor, the Engineer may request the Contractor to supply reasonable evidence that the nominated Subcontractor has received (Within 7 days of receipt of previous payment by the contractor) all amounts due in accordance with previous Payment Certificates, less applicable deductions for retention or otherwise. Unless the Contractor:

(a) submits this reasonable evidence to the Engineer, or

(b)

1. (i) satisfies the Engineer in writing that the Contractor is reasonably entitled to withhold or refuse to pay these amounts, and

2. (ii) submits to the Engineer reasonable evidence that the nominated Subcontractor has been notified of the Contractor's entitlement,

then the Employer may (at his sole discretion) pay, direct to the nominated Subcontractor, part or all of such amounts previously certified (less applicable

deductions) as are due to the nominated Subcontractor and for which the Contractor has failed to submit the evidence described in sub-paragraphs (a) or (b) above. The Contractor shall then repay, to the Employer, the amount which the nominated Subcontractor was directly paid by the Employer.

6. Staff and Labour

6.1 Engagement of Staff and Labour

Except as otherwise stated in the Specification, the Contractor shall make arrangements for the engagement of all staff and labour, local or otherwise, and for their payment, housing, feeding and transport.

The Contractor is encouraged, to the extent practicable and reasonable, to employ staff and labor with appropriate qualifications and experience from sources within the Country.

6.2 Rates of Wages and Conditions of Labour

The Contractor shall pay rates of wages, and observe conditions of labour, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.

If the Employer is obliged to provide amenities or arrange payment of wages to contract labour employed by the contractor either directly or through sub contractor under the contract on account of failures on the part the contractor to provide the amenities and / or arrange payment of wages to the contract labour as required of him under the provision of the said act / rules made there under, the Engineer/Employer shall be at liberty without prejudice to the rights of Engineer/Employer under Section 20(2) and 21(4) of the contract labour (Regulation and Abolition) Act 1970 to recover the whole or part of the expenditure so incurred on the wages so paid by the Engineer/Employer/Railway from the security deposit and/or from any sum or sums due to the contractor whether under this contract or any other contract.

The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in the Country in respect of such of their salaries, wages, allowances, and any benefits as are subject to taxes under the Laws of the Country for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such Laws.

The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there-under, regulation or notifications including amendment. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/ regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct any money due to the contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage

suffered by the Employer.

The employees of the Contractor and the Sub-Contractor in no case shall be treated as the employees of the Employer at any point of time.

The Contractor shall duly comply with the provisions of the Apprentices Act 1961 (III of 1961), the rules made there under and the orders that may be issued from time to time under the said Act and the said Rules and on his failure or neglect to do so he shall be subject to all liabilities provide by the said Act and said Rules.

The Contractor and his Sub Contractors shall comply with all applicable Labour Laws, and should not employ Child Labour for construction and maintenance activities. The Contractor shall provide appropriate facilities for children in Construction Camp sites.

The Contractors shall not differentiate wages between men and women for work of equal value.

6.3 Persons in the Service of Employer

The Contractor shall not recruit, or attempt to recruit, staff and labour from amongst persons in the service of the Employer or the Engineer.

6.4 Labour Laws

The Contractor shall comply with all the relevant labour Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration, and emigration, and shall allow them all their legal rights. The contractor and his sub-contractors shall be responsible to ensure at his own cost, compliance to all laws, bye-laws, rules and regulations for the time being in force pertaining to the employment of local or imported labour and shall take all necessary precautions to ensure and preserve the health and safety of all staff employed directly or through sub-contractors or petty contractors on the works, which shall include all the acts listed in Appendix – 1 but not limited to the same.

The Contractor shall require his employees to obey all applicable Laws, including those concerning safety at work.

During continuance of the Contract, the Contractor and his Sub-Contractors shall abide at all times by all existing labour enactments and rules made thereunder, regulations, notifications and bye laws of the State or Central government or local authority and any other labour laws (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that are applicable to construction industry are given in Appendix 1 to these Conditions of Contract.

6.5 Working Hours

No work shall be carried out on the Site on locally recognised days of rest, or outside the normal working hours stated in the Contract Data, unless:

(a) otherwise stated in the Contract,

(b) the Engineer gives consent, or

(c) the work is unavoidable, or necessary for the protection of life or property

or for the safety of the Works, in which case the Contractor shall immediately advise the Engineer.

6.6 Facilities for Staff and Labour

Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Employer's Personnel as stated in the Specification.

The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.

6.7 Health and Safety

The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and a standing arrangement for ambulance service are available at a phone call at all times at the Site and at any accommodation for Contractor's and Employer's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government or the local medical or sanitary authorities, for the purpose of dealing with and overcoming the same. The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the execution of the Works, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

The Contractor shall send, to the Engineer, details of any accident as soon as practicable after its occurrence.

HIV-AIDS Prevention. The Contractor shall conduct an HIV-AIDS awareness programme via an approved service provider, and shall undertake such other measures as are specified in this Contract to reduce the risk of the transfer of the HIV virus between and among the Contractor's Personnel and the local community, to promote early diagnosis and to assist affected individuals.

Epidemics

In the event of any outbreak of illness of an epidemic nature, the Contractor shall comply with and carry out such regulations, orders and requirements as may be made by the Government or the local medical or sanitary authorities, for the purpose of dealing with and overcoming the same.

Records of Safety and Health

The Contractor shall maintain such records and make such reports concerning safety, health and welfare of persons and damage to property as the Engineer may from time to time prescribe.

Submission of Returns: :

The contractor shall be responsible for timely submission of all returns and statements to the concerned authorities in full compliance of all rules, bye-laws and regulations for the time being in force.

The Contractor shall throughout the contract (including the Defects Notification Period): (i) conduct Information, Education and Consultation Communication (IEC) campaigns, at least every other month, addressed to all the Site staff and labor (including all the Contractor's employees, all Sub-Contractors and Consultants' employees, and all truck drivers and crew making deliveries to Site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behavior with respect to of Sexually Transmitted Diseases (STD)—or Sexually Transmitted Infections (STI) in general and HIV/AIDS in particular; (ii) provide male or female condoms for all Site staff and labor as appropriate; and (iii) provide for STI and HIV/AIDS screening, diagnosis, counseling and referral to a dedicated national STI and HIV/AIDS program, (unless otherwise agreed) of all Site staff and labor.

The Contractor shall include in the program to be submitted for the execution of the Works under Sub-Clause 8.3 an alleviation program for Site staff and labour and their families in respect of Sexually Transmitted Infections (STI) and Sexually Transmitted Diseases (STD) including HIV/AIDS. The STI, STD and HIV/AIDS alleviation program shall indicate when, how and at what cost the Contractor plans to satisfy the requirements of this Sub-Clause and the related specification. For each component, the program shall detail the resources to be provided or utilized and any related sub-contracting proposed. The program shall also include provision of a detailed cost estimate with supporting documentation. Payment to the Contractor for preparation and implementation this program shall not exceed the Provisional Sum dedicated for this purpose.

6.8 Contractor's Superintendence

Throughout the execution of the Works, and as long thereafter as is necessary to fulfil the Contractor's obligations, the Contractor shall provide all necessary superintendence to plan, arrange, direct, manage, inspect and test the work.

Superintendence shall be given by a sufficient number of persons having adequate knowledge of the language for communications (defined in Sub-Clause 1.4 [Law and Language]) and of the operations to be carried out (including the methods and techniques required, the hazards likely to be encountered and methods of preventing accidents), for the satisfactory and safe execution of the Works.

The Contractor shall employ the key personnel named in the Schedule of Personnel as referred to in the Contract Data to carry out the functions stated in the Schedule or other personnel approved by the Engineer. The Engineer will approve any proposed replacement of key personnel only if their qualifications, abilities and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.

The Contractor shall not employ any retired government Gazetted officer, who has either not completed one year after the date of retirement, or has not obtained permission to employment with the Contractor.

6.9 Contractor's Personnel

The Contractor's Personnel shall be appropriately qualified, skilled and experienced intheir respective trades or occupations. The Engineer may require the Contractor to remove (or cause to be removed) any person employed on the Site or Works, including the Contractor's Representative if applicable, who:

(a) persists in any misconduct or lack of care,

(b) carries out duties incompetently or negligently,

(c) fails to conform with any provisions of the Contract, or

(d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment.

If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons, the Contractor shall ensure that the person leaves the Site within seven (7) days and has no further connection with the work in the Contract. The replacement person shall be appointed within fourteen (14) days of the notification by the Engineer.

A reasonable proportion of the Contractor's Superintending Staff shall have a working knowledge of the English language or the Contractor shall have available on site at all times a sufficient number of competent interpreters to ensure the proper transmission of instructions and information. If appropriate, the Contractor shall then appoint (or cause to be appointed) a suitable replacement person.

6.10 Records of Contractor's Personnel and Equipment

The Contractor shall submit, to the Engineer, details showing the number of each class of Contractor's Personnel and of each type of Contractor's Equipment on the Site. Details shall be submitted each calendar month, in a form approved by the Engineer, until the Contractor has completed all work which is known to be outstanding at the completion date stated in the Taking-Over Certificate for the Works.

6.11 Disorderly Conduct

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst the Contractor's Personnel, and to preserve peace and protection of persons and property on and near the Site.

6.12 Foreign Personnel

The Contractor may bring in to the country any foreign personnel who are necessary for the execution of the Works to the extent allowed by the applicable Laws. The Contractor shall ensure that these personnel are provided with the required residence visas and work permits. The Employer will,without any financial liability, if requested by the Contractor, use his best endeavours in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national, or government permission required for bringing in the Contractor's personnel.

The Contractor shall be responsible for the return of these personnel to the place where they were recruited or to their domicile. In the event of the death in the Country of any of these personnel or members of their families, the Contractor shall similarly be responsible for making the appropriate arrangements for their return or burial. Contractor shall also be responsible for

any legal liabilities during their stay.

6.13 Supply of Foodstuffs The Contractor shall arrange for the provision of a sufficient supply of suitable food as may be stated in the Specification at reasonable prices for the Contractor's Personnel for the purposes of or in connection with the Contract.

6.14 Supply of Water The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking and other water for the use of the Contractor's Personnel.

6.15 Measures against Insect and Pest Nuisance The Contractor shall at all times take the necessary precautions to protect the Contractor's Personnel employed on the Site from insect and pest nuisance, and to reduce their danger to health. The Contractor shall comply with all the regulations of the local health authorities, including use of appropriate insecticide.

The Contractor shall provide his staff and labour with suitable prophylactics for the prevention of malaria, and take steps to prevent the formation of stagnant pools of water. He shall comply with all the regulations of the local health authorities in these respects and shall in particular arrange to spray thoroughly with approved insecticides all buildings erected on the site such treatment shall be carried out at least once a year or as instructed by the Engineer. The Contractor shall warn his staff and labour of the dangers of diseases like Malaria, Filaria and other contagious diseases etc. and also Scorpions, Snakes, Wild animals etc. and preventive actions required to be taken by the labour and staff.

6.16 Alcoholic Liquor or Drugs The Contractor shall not, otherwise than in accordance with the Laws of the Country, import, sell, give barter or otherwise dispose of any alcoholic liquor or drugs, or permit or allow importation, sale, gift barter or disposal thereto by Contractor's Personnel.

6.17 Arms and Ammunition The Contractor shall not give, barter, or otherwise dispose of, to any person, any arms or ammunition of any kind, or allow Contractor's Personnel to do so.

6.18 Festivals and Religious Customs The Contractor shall respect the Country's recognized festivals, days of rest and religious or other customs.

6.19 Funeral Arrange-ments The Contractor shall be responsible, to the extent required by local regulations, for making any funeral arrangements for any of his local employees who may die while engaged upon the Works.

6.20 Prohibition of Forced or Compulsory Labour The contractor shall not employ "forced or compulsory labour" in any form. "Forced or compulsory labour" consists of all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.

6.21 Prohibition of Harmful Child Labour

The Contractor shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.

6.22 Employment Records of Workers

The Contractor shall keep complete and accurate records of the employment of labour at the Site. The records shall include the names, ages, genders, hours worked and wages paid to all workers. These records shall be summarized on a monthly basis and shall be available for inspection by the Engineer during normal working hours. These records shall be included in the details to be submitted by the Contractor under Sub-Clause 6.10 [Records of Contractor's Personnel and Equipment].

(i) In addition to the above, the Contractor shall register his firm/company etc. on website 'www.shramikkalyan.indianrailways.gov.in' and upload requisite details of labour and their payment in this portal. These details shall be available in public domain. The Registration/ updation on Portal shall be done as under:

(a) 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. Employer/Engineer shall approve the contractor's registration in the portal within 7 days of receipt of such request.

(b) Contractor once approved by any Employer/Engineer, can create password with login ID (PAN No.) for subsequent use of portal for all LoAs issued in his favour.

(c) The contractor once registered on the portal, shall provide details of his Letter of Acceptances (LoA) / Contract Agreements on shramikkalyan portal within 15 days of issue of any LoA for approval of concerned Employer/Engineer. Employer/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 Employer/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.

(e) It shall be mandatory upon the contractor to ensure correct and prompt uploading of all salient details of engaged contractual labour & payments made thereof after each wage period.

(ii) While processing payment of any 'Interim Payment Certificate' or 'Final Payment Certificate' or release of 'Advances' or 'Performance Guarantee /

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

7. Plant, Materials and Workmanship

7.1 Manner of Execution

The Contractor shall carry out the manufacture of Plant, the production andmanufacture of Materials, and all other execution of the Works:

(a) in the manner (if any) specified in the Contract,

(b) in a proper workmanlike and careful manner, in accordance with recognised good practice, and

(c) with properly equipped facilities and non-hazardous Materials, except as otherwise specified in the Contract.

7.2 Samples

The Contractor shall submit the following samples of Materials, and relevant information, to the Engineer for consent prior to using the Materials in or for the Works:

(a) manufacturer's standard samples of Materials and samples specified in the Contract, all at the Contractor's cost, and

(b) additional samples instructed by the Engineer as a Variation.

Each sample shall be labelled as to origin and intended use in the Works.

7.3 Inspection

The Employer's Personnel shall at all reasonable times:

(a) have full access to all parts of the Site and to all places from which natural Materials are being obtained, and

(b) during production, manufacture and construction (at the Site and elsewhere), be entitled to examine, inspect, measure and test the materials and workmanship, and to check the progress of manufacture of Plant and production and manufacture of Materials.

The Contractor shall give the Employer's Personnel full opportunity to carry out these activities, including providing access, facilities, permissions and safety equipment. No such activity shall relieve the Contractor from any obligation or responsibility.

The Contractor shall give notice to the Engineer whenever any work is ready and before it is covered up, put out of sight, or packaged for storage or transport. The Engineer shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or promptly give notice to the Contractor that the Engineer does not require to do so. If the Contractor fails to give the notice, he shall, if and when required by the Engineer, uncover the work and thereafter reinstate and make good, all at the Contractor's cost.

7.4 Testing

This Sub-Clause shall apply to all tests specified in the Contract, other than the Tests after Completion (if any).

The Contractor shall provide all apparatus, assistance, documents and other information, electricity, equipment, fuel, consumables, instruments, labour, materials, and suitably qualified and experienced staff, as are necessary to carry out the specified tests efficiently. The Contractor shall agree, with the Engineer, the time and place for the specified testing of any Plant, Materials and other parts of the Works.

The Engineer may, under Clause 13 [Variations and Adjustments], vary the location or details of specified tests, or instruct the Contractor to carry out additional tests. If these varied or additional tests show that the tested Plant, Materials or workmanship is not in accordance with the Contract, the cost of carrying out this Variation shall be borne by the Contractor, notwithstanding other provisions of the Contract.

The Engineer shall give the Contractor not less than 24 hours' notice of the Engineer's intention to attend the tests. If the Engineer does not attend at the time and place agreed, the Contractor may proceed with the tests, unless otherwise instructed by the Engineer, and the tests shall then be deemed to have been made in the Engineer's presence.

If the Contractor suffers delay and/or incurs Cost from complying with these instructions or as a result of a delay for which the Employer is responsible, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

(b) payment of any such Cost , which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

The Contractor shall promptly forward to the Engineer duly certified reports of the tests. When the specified tests have been passed, the Engineer shall endorse the Contractor's test certificate, or issue a certificate to him, to that effect. If the Engineer has not attended the tests, he shall be deemed to have accepted the readings as accurate.

7.5 Rejection

If, as a result of an examination, inspection, measurement or testing, any Plant, Materials or workmanship is found to be defective or otherwise not in accordance with the Contract, the Engineer may reject the Plant, Materials or workmanship by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the defect and ensure that the rejected item complies with the Contract.

If the Engineer requires this Plant, Materials or workmanship to be retested, the tests shall be repeated under the same terms and conditions. If the rejection and retesting cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay these costs to the Employer.

7.6 Remedial Work

Notwithstanding any previous test or certification, the Engineer may instruct the Contractor to:

(a) remove from the Site and replace any Plant or Materials which is not in accordance with the Contract,

(b) remove and re-execute any other work which is not in accordance with the Contract, and

(c) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise.

The Contractor shall comply with the instruction within a reasonable time, which shall be the time (if any) specified in the instruction, or immediately if urgency is specified under sub-paragraph (c).

If the Contractor fails to comply with the instruction, the Employer shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay to the Employer all costs arising from this failure.

7.7 Ownership of Plant and Materials

Each item of Plant and Materials shall, to the extent consistent with the Laws of the Country, become the property of the Employer at whichever is the earlier of the following times, free from liens and other encumbrances:

(a) when it is delivered to the Site;

(b) when the Contractor is entitled to payment of the value of the Plant and Materials under Sub-Clause 8.10 [Payment for Plant and Materials in Event of Suspension].

7.8 Royalties

Unless otherwise stated in the Specification, the Contractor shall pay all royalties, rents and other payments for:

(a) natural Materials obtained from outside the Site, and

(b) the disposal of material from demolitions and excavations and of other surplus material (whether natural or man-made), except to the extent that disposal areas within the Site are specified in the Contract.

8. Commencement, Delays and Suspension

8.1 Commencement of Works

The Engineer shall give the Contractor not less than 7 days' notice of the Commencement Date. Unless otherwise stated in the Special Conditions of Contract, the Commencement Date shall be within the number of days after the Contractor receives the Letter of Acceptance as specified in Contract Data.

The Contractor shall commence the execution of the Works as soon as is reasonably practicable after the Commencement Date, and shall then proceed with the Works with due expedition and without delay.

8.2 Time for Completion

The Contractor shall complete the whole of the Works, and each Section (if any), within the Time for Completion for the Works or Section (as the case may be), including:

(a) achieving the passing of the Tests on Completion, and

(b) completing all work which is stated in the Contract as being required for

whole of the Works or Section(s) to be considered to be completed for the purposes of taking-over under Sub-Clause 10.1 [Taking Over of the Works and Sections].

(c) The date of completion for works described in this sub-clause, shall be the earliest of the following :

(i) The date CRS recommends opening of the Section(s) for public carriage of passengers to Central Government, for speeds of not less than 75% of the designed operating speeds or,

(ii) The date CRS authorises the Railway Administration for opening of Section(s), subject to sanction of the Central Government for speeds of not less than 75% of the designed operating speeds, or,

(iii) The date CRS authorizes/sanctions openingof Section(s) without inspection.

8.3 Programme

The Contractor shall submit a detailed time programme to the Engineer within 28 days after receiving the notice under Sub-Clause 8.1 *[Commencement of Works].* The program shall include the physical and Financial Progress vis-à-vis program and forecast cash flow adopting Project Management Software Primavera/Sure Track/MS Project or as mutually agreed. The program must identify the milestones, interface requirements and program reporting elements. The Contractor shall supply, free of cost one set of authorized software to the Engineer and the soft copy of structured program for the project. This shall be updated every month. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations. Each programme shall include:

(a) the order in which the Contractor intends to carry out the Works, including the anticipated timing of each stage of design (if any), Contractor's Documents, procurement, manufacture of Plant, delivery to Site, construction, erection and testing,

(b) each of these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]),

(c) the sequence and timing of inspections and tests specified in the Contract, and

(d) a supporting report which includes:

(i) a general description of the methods which the Contractor intends to adopt, and of the major stages, in the execution of the Works, and

(ii) details showing the Contractor's reasonable estimate of the number of each class of Contractor's Personnel and of each type of Contractor's Equipment, required on the Site for each major stage.

Unless the Engineer, within 21 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme,

subject to his other obligations under the Contract. The Employer's Personnel shall be entitled to rely upon the programme when planning their activities.

The Contractor shall promptly give notice to the Engineer of specific probable future events or circumstances which may adversely affect the work, increase the Contract Price or delay the execution of the Works. The Engineer may require the Contractor to submit an estimate of the anticipated effect of the future event or circumstances, and/or a proposal under Sub-Clause 13.3 [Variation Procedure].

If, at any time, the Engineer gives notice to the Contractor that a programme fails (to the extent stated) to comply with the Contract or to be consistent with actual progress and the Contractor's stated intentions, the Contractor shall submit a revised programme to the Engineer within 15 days in accordance with this Sub-Clause.

8.4 Extension of Time for Completion

The Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [Taking-Over of the Works and Sections] is or will be delayed by any of the following causes:

(a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 [Variation Procedure]) or other substantial change in the quantity of an item of work included in the Contract,

(b) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions,

(c) exceptionally adverse climatic conditions,

(d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or

(e) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other contractors.

If the Contractor considers himself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Engineer in accordance with Sub-Clause 20.1 [Contractor's Claims]. When determining each extension of time under Sub-Clause 20.1, the Engineer shall review previous determinations and may increase, but shall not decrease, the total extension of time.

8.5 Delays Caused by Authorities

If the following conditions apply, namely:

(a) the Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in the Country,

(b) these authorities delay or disrupt the Contractor's work, and

(c) the delay or disruption was Unforeseeable,

then this delay or disruption will be considered as a cause of delay under sub-paragraph (b) of Sub-Clause 8.4 [Extension of Time for Completion].

8.6 Rate of Progress

If, at any time:

(a) actual progress is too slow to complete within the Time for Completion, and/or

(b) progress has fallen (or will fall) behind the current programme under Sub-Clause 8.3 [Programme],

other than as a result of a cause listed in Sub-Clause 8.4 [Extension of Time for Completion], then the Engineer may instruct the Contractor to submit, under Sub-Clause 8.3 [Programme], a revised programme and supporting report describing the revised methods which the Contractor proposes to adopt in order to expedite progress and complete within the Time for Completion.

Unless the Engineer notifies otherwise, the Contractor shall adopt these revised methods, which may require increases in the working hours and/or in the numbers of Contractor's Personnel and/or Goods, at the risk and cost of the Contractor. If these revised methods cause the Employer to incur additional costs, the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay these costs to the Employer, in addition to delay damages (if any) under Sub-Clause 8.7 below.

8.7 Extension of Time for Completion with Delay Damages

If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion for entire work or for specified section wise completion period], and he is not entitled to an extension of time under sub clause 8.4 then the employer may grant extension of time with delay damage in such case, the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay delay damages to the Employer for this default. These delay damages shall be the sum stated in the Contract Data, which shall be paid for every day which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate.

a. In case delay is fully attributable to the contractor, then the employer may grant extension of time with delay damage as stated in the Contract Data. The decision of Employer in this regard will be final and binding.

b. In case delay is partly attributable to the contractor, then the employer may grant extension of time without or with delay damages as stated in the Contract Data, keeping in view the delays attributable to the contractor, delays for other reasons and in overall interest of completion of the work. The decision of Employer in this regard will be final and binding.

These delay damages shall be the only damages due from the Contractor for such default, other than in the event of termination under Sub-Clause 15.2 [Termination by Employer] prior to completion of the Works. These damages shall not relieve the Contractor from his obligation to complete the Works, or from any other duties, obligations or responsibilities which he may have under the Contract.

The total amount due under this Sub- Clause shall not exceed the maximum amount of delay damages (if any) stated in the Contract Data.

The imposition of delay damages under this sub clause shall debar the contractor from raising any claims for extended stay.

8.7.1 Provisional Delay Damages for failure to achieve agreed target for the Financial Year :

Targets in terms of physical milestones (completion and commissioning of block sections or Major Bridges etc) be achieved during the current Financial Year from the date of commencement, duly considering the site availability, drawings etc, shall be agreed between the parties. On completion of the Financial Year, targets for next Financial Year shall be agreed similarly and so on for every Financial Year. In case of non-achievement of agreed targets in the previous Financial Year, for the reasons attributed to the contractor, provisional delay damages @ 1/5000 of Contacts Price per month shall be imposed starting from April month till the month the targets are achieved. If multiple milestones are agreed for any Financial Year and say 3 out of 5 milestones were achieved during the Financial Year, then provisional delay damages @ (2/5 of 1/5000)of Contact Price shall be deducted till the month any of the remaining milestone is achieved. On achievement of one out of the two milestones the rate of delay damages shall stand reduced to @(1/5 of 1/5000)of Contacts Price. If no milestones are agreed for any Financial Year, the stipulation of provisional delay damages shall not apply

If the contractor complete the entire works within the original completion period or extended completion period under clause 8.4 of GCC (without imposition of delay damages), the entire amount deducted for provisional delay damages shall be refunded to the contractor . In case the contractor is unable to complete the entire works within the original completion period or extended completion period under clause 8.4 of GCC resulting in delay in completion of the project under clause 8.7 of GCC (with imposition of delay damages), then the provisional delay damages deducted shall be adjusted against the delay damages to be finally imposed on the contractor.

8.8 Suspension of Work

The Engineer may at any time instruct the Contractor to suspend progress of part or all of the Works. During such suspension, the Contractor shall protect, store and secure such part or the Works against any deterioration, loss or damage.

The Engineer may also notify the cause for the suspension. If and to the extent that the cause is notified and is the responsibility of the Contractor, the following Sub-Clauses 8.9, 8.10 and 8.11 shall not apply.

8.9 Consequences of Suspension

If the Contractor suffers delay and/or incurs Cost from complying with the Engineer's instructions under Sub-Clause 8.8 [Suspension of Work] and/or from resuming the work, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

(b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

The Contractor shall not be entitled to an extension of time for, or to payment of the Cost incurred in, making good the consequences of the Contractor's faulty design, workmanship or materials, or of the Contractor's failure to protect, store or secure in accordance with Sub-Clause 8.8 [Suspension of Work].

8.10 Payment for Plant and Materials in Event of Suspension

The Contractor shall be entitled to payment of the value (as at the date of suspension)of Plant and/or Materials, if:

(a) the work on Plant or delivery of Plant and/or Materials has been suspended for more than 28 days,

(b) the Contractor has marked the Plant and/or Materials as the Employer's property in accordance with the Engineer's instructions, and

(c) Such materials or plant is received at site.

8.11 Prolonged Suspension

If the suspension under Sub-Clause 8.8 [Suspension of Work] has continued for more than 84 days, the Contractor may request the Engineer's permission to proceed. If the Engineer does not give permission within 28 days after being requested to do so, the Contractor may, by giving notice to the Engineer, treat the suspension as an omission under Clause 13 [Variations and Adjustments] of the affected part of the Works. If the suspension affects the whole of the Works, the Contractor may give notice of termination under Sub-Clause 16.2 [Termination by Contractor].

8.12 Resumption of Work

After the permission or instruction to proceed is given, the Contractor and the Engineer shall jointly examine the Works and the Plant and Materials affected by the suspension. The Contractor shall make good any deterioration or defect in or loss of the Works or Plant or Materials, which has occurred during the suspension.

8.13 Bonus for early completion:

If the Contractor achieves completion of the whole of the Works or any section(s) prior to the intended Completion Date prescribed in Contract data (Extension of time pursuant to Clause 8.4 or any other clause of these conditions will not be considered), the Employer shall pay to the Contractor a sum stated in the Contract data as bonus for early completion, for every calendar month which shall elapse between the date of completion of all items of works as stipulated in the contract, including variations ordered by the Engineer and the time prescribed in Clause 8.2.

For the purpose of calculating bonus payments, the time given in the Bid for completion of the whole works or any section(s) is fixed and unless otherwise agreed, no adjustment of the time by reasons of granting an extension of time pursuant to clause 8.4 or any other clause of these conditions will be allowed. Any period falling short of completed month shall be ignored for the purpose of computing the period relevant for the payment of bonus.

9. Tests on Completion

9.1 Contractor's Obligations

The Contractor shall carry out the Tests on Completion in accordance with this Clause and Sub-Clause 7.4 [Testing], after providing the documents in accordance with sub-paragraph (d) of Sub-Clause 4.1 [Contractor's General Obligations].

The Contractor shall give to the Engineer not less than 21 days' notice of the date after which the Contractor will be ready to carry out each of the Tests on Completion. Unless otherwise agreed, Tests on Completion shall be carried out

within 14 days after this date, on such day or days as the Engineer shall instruct.

In considering the results of the Tests on Completion, the Engineer shall make allowances for the effect of any use of the Works by the Employer on the performance or other characteristics of the Works. As soon as the Works, or a Section, have passed any Tests on Completion, the Contractor shall submit a certified report of the results of these Tests to the Engineer.

9.2 Delayed Tests

If the Tests on Completion are being unduly delayed by the Employer, Sub-Clause 7.4 [Testing] (fifth paragraph) and/or Sub-Clause 10.3 [Interference with Tests on Completion] shall be applicable.

If the Tests on Completion are being unduly delayed by the Contractor, the Engineer may by notice require the Contractor to carry out the Tests within 21 days after receiving the notice. The Contractor shall carry out the Tests on such day or days within that period as the Contractor may fix and of which he shall give notice to the Engineer.

If the Contractor fails to carry out the Tests on Completion within the period of 21 days, the Employer's Personnel may proceed with the Tests at the risk and cost of the Contractor. The Tests on Completion shall then be deemed to have been carried out in the presence of the Contractor and the results of the Tests shall be accepted as accurate.

9.3 Retesting

If the Works, or a Section, fail to pass the Tests on Completion, Sub-Clause 7.5 [Rejection] shall apply, and the Engineer or the Contractor may require the failed Tests, and Tests on Completion on any related work, to be repeated under the same terms and conditions.

9.4 Failure to Pass Tests on Completion

If the Works, or a Section, fail to pass the Tests on Completion repeated under Sub-Clause 9.3 [Retesting], the Engineer shall be entitled to:

(a) order further repetition of Tests on Completion under Sub-Clause 9.3;

(b) if the failure deprives the Employer of substantially the whole benefit of the Works or Section, reject the Works or Section (as the case may be), in which event the Employer shall have the same remedies as are provided in sub-paragraph (c) of Sub-Clause 11.4 [Failure to Remedy Defects]; or

(c) issue a Taking-Over Certificate, if the Employer so requests.

In the event of sub-paragraph (c), the Contractor shall proceed in accordance with all other obligations under the Contract, and the Contract Price shall be reduced by such amount as shall be appropriate to cover the reduced value to the Employer as a result of this failure. Unless the relevant reduction for this failure is stated (or its method of calculation is defined) in the Contract, the Employer may require the reduction to be (i) agreed by both Parties (in full satisfaction of this failure only) and paid before this Taking-Over Certificate is issued, or (ii) determined and paid under Sub-Clause 2.5 [Employer's Claims] and Sub-Clause 3.5 [Determinations].

9.5 Contractor's obligations

Not with standing the provisions of sub-clauses 4.1, 9.1 to 9.4 the provisions in subsequent sub-clauses shall apply for works of Permanent Way, signaling and telecommunication and railway electrification excluding General Electrical Services.

(a) The Contractor shall be responsible for the execution of temporary and/or permanent works which may require the prior sanction/approval of Commissioner of Railway Safety (CRS) in accordance with extant rules for " The Railways opening for Public Carriage of Passengers" was amended from time to time. And applicable as and when the works are undertaken. The Contractor shall initiate the process for approval at least **63** (sixty three) days prior to undertaking such works which require the approval of Commissioner of Railway Safety (CRS) and furnish draft documentation to the Engineer.

(b) The Contractor shall ensure that existing services and operations for public carriage of passengers or goods, are not affected except those, which are essentially required to be regulated for execution of works. Such items of works shall be planned and coordinated through the Engineer.

(c) Prior to the commencement of commercial operations of passenger traffic :

(i) The Contractor may have to operate locomotives, track machines and any other rolling stock for track tamping, trial runs, etc. for which track, signaling or OHE works must comply with the specifications.

(ii) The Employer may permit freight train operations to Railway after certification by the authorized person of Zonal Railway

(iii) The Contractor shall be responsible for maintaining the facilities ensuring safety of operations under (i) & (ii) above as per specifications.

10. Employer's Taking Over

10.1 Taking Over of the Works and Sections

Except as stated in Sub-Clause 9.4 [Failure to Pass Tests on Completion], the Works shall be taken over by the Employer/Railwaywhen (i) the Works have been completed in accordance with the Contract, including the matters described in Sub-Clause 8.2 [Time for Completion] and except as allowed in sub-paragraph (a) below, and (ii) a Taking-Over Certificate for the Works has been issued, or is deemed to have been issued in accordance with this Sub-Clause.

The Contractor may apply by notice to the Engineer for a Taking-Over Certificate not earlier than 14 days before the Works will, in the Contractor's opinion, be complete and ready for taking over. If the Works are divided into Sections, the Contractor may similarly apply for a Taking-Over Certificate for each Section.

In case the works are to be taken over in accordance with sub-clause 9.5, the completed works shall be taken over by the Zonal Railway with the procedure specified by the Engineer.

The Engineer shall, within 28 days after receiving the Contractor's application:

(a) issue the Taking-Over Certificate to the Contractor, stating the date on which the Works or Section were completed in accordance with the Contract, except for any minor outstanding work and defects which will not substantially affect the use of the Works or Section for their intended purpose (either until or whilst this work is completed and these defects are remedied); or

(b) reject the application, giving reasons and specifying the work required to be done by the Contractor to enable the Taking-Over Certificate to be issued. The Contractor shall then complete this work before issuing a further notice under this Sub-Clause.

If the Engineer fails either to issue the Taking-Over Certificate or to reject the Contractor's application within the period of 28 days, and if the Works or Section (as the case may be) are substantially in accordance with the Contract, the Taking-Over Certificate shall be deemed to have been issued on the last day of that period.

10.2 Taking Over of Parts of the Works

The Engineer may, at the sole discretion of the Employer, issue a Taking-OverCertificate for any part of the Permanent Works.

The Employer shall not use any part of the Works (other than as a temporary measure which is either specified in the Contract or agreed by both Parties) unless and until the Engineer has issued a Taking-Over Certificate for this part. However, if the Employer does use any part of the Works before the Taking-Over Certificate is issued:

(a) the part which is used shall be deemed to have been taken over as from the date on which it is used,

(b) the Contractor shall cease to be liable for the care of such part as from this date, when responsibility shall pass to the Employer, and

(c) if requested by the Contractor, the Engineer shall issue a Taking-Over Certificate for this part.

After the Engineer has issued a Taking-Over Certificate for a part of the Works, the Contractor shall be given the earliest opportunity to take such steps as may be necessary to carry out any outstanding Tests on Completion. The Contractor shall carry out these Tests on Completion as soon as practicable before the expiry date of the relevant Defects Notification Period.

If the Contractor incurs Cost as a result of the Employer taking over and/or using a part of the Works, other than such use as is specified in the Contract or agreed by the Contractor, the Contractor shall (i) give notice to the Engineer and (ii) be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to payment of any such Cost, which shall be included in the Contract Price. After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this Cost and profit.

If a Taking-Over Certificate has been issued for a part of the Works (other than a Section), the delay damages thereafter for completion of the remainder of the Works shall be reduced. Similarly, the delay damages for the remainder of the Section (if any) in which this part is included shall also be reduced. For any

period of delay after the date stated in this Taking-Over Certificate, the proportional reduction in these delay damages shall be calculated as the proportion which the value of the part so certified bears to the value of the Works or Section (as the case may be) as a whole. The Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these proportions. The provisions of this paragraph shall only apply to the daily rate of delay damages under Sub-Clause 8.7 [Delay Damages], and shall not affect the maximum amount of these damages.

10.3 Interference with Tests on Completion

If the Contractor is prevented, for more than 14 days, from carrying out the Tests onCompletion by a cause for which the Employer/Engineer/other Contractors of the Employer,

are responsible, the Employer shall be deemed to have taken over the Works or Section (as the case may be) on the date when the Tests on Completion would otherwise have been completed.

The Engineer shall then issue a Taking-Over Certificate accordingly, and the Contractor shall carry out the Tests on Completion as soon as practicable, before the expiry date of the Defects Notification Period. The Engineer shall require the Tests on Completion to be carried out by giving 14 days' notice and in accordance with the relevant provisions of the Contract.

If the Contractor suffers delay and/or incurs Cost as a result of this delay in carrying out the Tests on Completion, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

(b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

10.4 Surfaces Requiring Reinstatement

Except as otherwise stated in a Taking-Over Certificate, a certificate for a Section orpart of the Works shall not be deemed to certify completion of any ground or other surfaces requiring reinstatement.

11. Defects Liability

11.1 Completion of Outstanding Work and Remedying Defects

In order that the Works and Contractor's Documents, and each Section, shall be in the condition required by the Contract (fair wear and tear excepted) by the expiry date of the relevant Defects Notification Period or as soon as practicable thereafter, the Contractor shall:

(a) complete any work which is outstanding on the date stated in a Taking-Over Certificate, within such reasonable time as is instructed by the Engineer, and

(b) execute all work required to remedy defects or damage, as may be notified by (or on behalf of) the Employer on or before the expiry date of the Defects Notification Period for the Works or Section (as the case may

be).

If a defect appears or damage occurs, the Contractor shall be notified accordingly, by (or on behalf of) the Employer.

11.2 Cost of Remedying Defects

All work referred to in sub-paragraph (b) of Sub-Clause 11.1 [Completion of Outstanding Work and Remedying Defects] shall be executed at the risk and cost of the Contractor, if and to the extent that the work is attributable to:

(a) any design for which the Contractor is responsible,

(b) Plant, Materials or workmanship not being in accordance with the Contract, or

(c) failure by the Contractor to comply with any other obligation.

If and to the extent that such work is attributable to any other cause, the Contractor shall be notified promptly by (or on behalf of) the Employer, and Sub-Clause 13.3 [Variation Procedure] shall apply.

11.3 Extension of Defects Notification Period

The Employer shall be entitled subject to Sub-Clause 2.5 [Employer's Claims] to an extension of the Defects Notification Period for the Works or a Section if and to the extent that the Works, Section or a major item of Plant (as the case may be, and after taking over) cannot be used for the purposes for which they are intended by reason of a defect or damage. However, a Defects Notification Period shall not be extended by more than two years.

If delivery and/or erection of Plant and/or Materials was suspended under Sub-Clause 8.8 [Suspension of Work] or Sub-Clause 16.1 [Contractor's Entitlement to Suspend Work], the Contractor's obligations under this Clause shall not apply to any defects or damage occurring more than two years after the Defects Notification Period for the Plant and/or Materials would otherwise have expired.

11.4 Failure to Remedy Defects

If the Contractor fails to remedy any defect or damage within a reasonable time, a date may be fixed by (or on behalf of) the Employer, on or by which the defect or damage is to be remedied. The Contractor shall be given reasonable notice of this date.

If the Contractor fails to remedy the defect or damage by this notified date and this remedial work was to be executed at the cost of the Contractor under Sub-Clause 11.2 [Cost of Remedying Defects], the Employer may (at his option):

(a) Carry out the work himself or by others, in a reasonable manner and at the Contractor's cost, but the Contractor shall have no responsibility for this work; and the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay to the Employer the costs reasonably incurred by the Employer in remedying the defect or damage;

(b) require the Engineer to agree or determine a reasonable reduction in the Contract Price in accordance with Sub-Clause 3.5 [Determinations]; or

(c) if the defect or damage deprives the Employer of substantially the whole benefit of the Works or any major part of the Works, terminate the Contract as a whole, or in respect of such major part which cannot be put to the intended use. Without prejudice to any other rights, under the

Contract or otherwise, the Employer shall then be entitled to recover all sums paid for the Works or for such part (as the case may be), plus financing costs and the cost of dismantling the same, clearing the Site and returning Plant and Materials to the Contractor.

11.5 Removal of Defective Work

If the defect or damage cannot be remedied expeditiously on the Site and theEmployer gives consent, the Contractor may remove from the Site for the purposesof repair such items of Plant as are defective or damaged. This consent may require the Contractor to increase the amount of the Performance Security by the full replacement cost of these items, or to provide other appropriate security.

11.6 Further Tests

If the work of remedying of any defect or damage may affect the performance of the Works, the Engineer may require the repetition of any of the tests described in the Contract. The requirement shall be made by notice within 28 days after the defect or damage is remedied.

These tests shall be carried out in accordance with the terms applicable to the previous tests, except that they shall be carried out at the risk and cost of the Party liable, under Sub-Clause 11.2 [Cost of Remedying Defects], for the cost of the remedial work.

11.7 Right of Access

Until the Performance Certificate has been issued, the Contractor shall have such right of access to the Works as is reasonably required in order to comply with this Clause, except as may be inconsistent with the Employer's reasonable security restrictions.

11.8 Contractor to Search

The Contractor shall, if required by the Engineer, search for the cause of any defect, under the direction of the Engineer. Unless the defect is to be remedied at the cost of the Contractor under Sub-Clause 11.2 [Cost of Remedying Defects], the Cost of the search shall be agreed or determined by the Engineer in accordance with Sub-Clause 3.5 [Determinations] and shall be included in the Contract Price.

11.9 Performance Certificate

Performance of the Contractor's obligations shall not be considered to have been completed until the Employer has issued the Performance Certificate to the Contractor, stating the date on which the Contractor completed his obligations under the Contract.

The Employer shall issue the Performance Certificate within 28 days after the latest of the expiry dates of the Defects Notification Periods, or as soon thereafter as the Contractor has supplied all the Contractor's Documents and completed and tested all the Works, including remedying any defects.

Only the Performance Certificate shall be deemed to constitute acceptance of the Works.

11.10 Unfulfilled Obligations

After the Performance Certificate has been issued, each Party shall remain liable for the fulfilment of any obligation which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.

11.11 Clearance of Site Upon receiving the Performance Certificate, the Contractor shall remove any remaining Contractor's Equipment, surplus material, wreckage, rubbish and Temporary Works from the Site.

If all these items have not been removed within 28 days after the Employer receives a copy of the Performance Certificate, the Employer may sell or otherwise dispose of any remaining items. The Employer shall be entitled to be paid the costs incurred in connection with, or attributable to, such sale or disposal and restoring the Site.

Any balance of the moneys from the sale shall be paid to the Contractor. If these moneys are less than the Employer's costs, the Contractor shall pay the outstanding balance to the Employer.

12. Measurement and Evaluation

12.1 Works to be Measured The Works shall be measured, and valued for payment, in accordance with this Clause.

Whenever the Engineer requires any part of the Works to be measured, reasonable notice shall be given to the Contractor's Representative, who shall:

(a) promptly either attend or send another qualified representative to assist the Engineer in making the measurement, and

(b) supply any particulars requested by the Engineer.

If the Contractor fails to attend or send a representative, the measurement made by (or on behalf of) the Engineer shall be accepted as accurate.

Except as otherwise stated in the Contract, wherever any Permanent Works are to be measured from records, these shall be prepared by the Engineer. The Contractor shall, as and when requested, attend to examine and agree the records with the Engineer, and shall sign the same when agreed. If the Contractor does not attend, the records shall be accepted as accurate.

If the Contractor examines and disagrees the records, and/or does not sign them as agreed, then the Contractor shall give notice to the Engineer of the respects in which the records are asserted to be inaccurate. After receiving this notice, the Engineer shall review the records and either confirm or vary them. If the Contractor does not so give notice to the Engineer within 14 days after being requested to examine the records, they shall be accepted as accurate.

12.2 Method of Measurement Except as otherwise stated in the Contract and notwithstanding local practice:

(a) measurement shall be made of the net actual quantity of each item of the Permanent Works, and

(b) the method of measurement shall be in accordance with the Bill of Quantities or other applicable Schedules.

12.3 Evaluation Except as otherwise stated in the contract, the Engineer shall proceed in accordance with sub clause 3.5 (Determinations) to agree or

determine the contract price by evaluating each item of work, applying the measurement agreed or determined in accordance with the above sub clause 12.1 and 12.2 and the appropriate rate or price for the item.

For each item of work, the appropriate rate or price for the item shall be the rate or price specified for such item in the contract or, if there is no such item, specified for similar work.

12.3.1

However, a new rate or price shall be appropriate for an item of work if :

(a) all the following conditions are met for existing item of the contract:

(i) the measured quantity of the item is increased by more than 50% from the quantity of this item in the Bill of Quantities or the Schedule,

(ii) this item is not specified in the contract as a "fixed rate item".

OR

(b) (i) the work is instructed under clause 13[Variations and Adjustments],

(ii) no rate or price is specified in the contract for this item, and

(iii) no specified rate or price is appropriate because the item of work is not of similar character, or is not executed under similar conditions, as any item in the contract.

OR

(c) On passage of original completion period stipulated in the contract, if site in some stretches has not been handed over for execution of the work due to any of the reasons mentioned below:

(i) non acquisition of land,

(ii) non availability of forest/wild life clearances,

(iii) non removal of encroachments, delay in shifting of utilities (to be shifted by other agencies) and

(iv) non handing over of the sites by other agencies/authorities

and the contractor otherwise has been executing the works satisfactorily on other sites, as certified by the Engineer, the contractor shall be entitled for new rates for the items and quantities of work which could not be executed in the stretches still to be handed over. In case the progress is not satisfactory,

the contractor shall not be entitled for new rates and the Employer shall have the option either to continue the work in these stretches through the same agency or get it executed through other means.

In case of entitlement for new rates, if the contractor is not willing to take up the work in these stretches, he will have the option to say so in writing or if no agreement is reached on new rates, the remaining works of such stretches shall be excluded from the scope of the contract through a variation statement. In such a case the contractor shall not be entitled for any claim or compensation on this account. The employer shall get the remaining works on these stretches executed through other means.

12.3.2

(i) Each new rate or price for item(s) as described in sub paragraph 12.3.1 (a) & (c) above shall be derived from an assessment of the reasonable cost of executing the work with an additional element of 15% towards overheads and profit of the Contractor.

(ii) Each new rate or price for item(s) as described in sub paragraph 12.3.1 (b) above shall be derived from an assessment of the reasonable cost of executing the work with an additional element of 15% towards overheads and profit of the Contractor, subject to the condition that such item(s) as described in sub paragraph 12.3.1 (b) above is/are not available in the "Standard Bill of Quantities of RVNL".

(iii) In case item(s) as described in sub paragraph 12.3.1 (b) above is/are available in the latest "Standard Bill of Quantities of RVNL, new rate or price for such items shall be the rate as available in the latest "Standard Bill of Quantities of RVNL and price variation shall be applicable from the date upto which rates have been updated in the SBOQ.

(iv) The assessment of reasonable cost of executing the work (except over heads and profit which shall be 15%) shall be arrived at based on the prevailing rates and by taking guidance from the following documents. The priority of the documents shall be in accordance with the following sequence:

a) Analysis of Unified SOR of Indian Railway;

b) Analysis issued by MORTH;

c) Analysis of Delhi Schedule of Rates issued by CPWD;

d) Market analysis.

(v) If the final rate decided by the competent authority as per RVNL SOP is not acceptable to the contractor, the contractor will be bound to execute the work at the rates as decided by the competent authority of RVNL but he may refer the dispute in rate for settlement as per provisions of clause 20 of General Conditions of Contract. Until such time as an appropriate rate or price is agreed or determined, the Engineer shall make the Interim payment at the rate of 90% of the rate proposed by him and accepted by the Project Director (concerned CPM/GM in charge of the project).

12.3.3 Until such time an appropriate rate or price is agreed or determined, the Engineer shall make the Interim payment at the rate of 90% of the rate proposed by him and accepted by the Project Director (concerned CPM/GM in charge of the project).

12.4 Omissions Whenever the omission of any work forms part (or all) of a Variation, the value of which has not been agreed, if:

(a) the Contractor will incur (or has incurred) cost which, if the work had not been omitted, would have been deemed to be covered by a sum forming part of the Accepted Contract Amount;

(b) the omission of the work will result (or has resulted) in this sum not forming part of the Contract Price; and

(c) this cost is not deemed to be included in the evaluation of any substituted work;

then the Contractor shall give notice to the Engineer accordingly, with supporting particulars. Upon receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine this cost, which shall be included in the Contract Price.

13. Variations and Adjustments

13.1 Right to Vary Variations may be initiated by the Employer at any time prior to issuing the Taking-Over Certificate for the Works, either by an instruction or by making a request to the Contractor to submit a proposal.

The Contractor shall execute and be bound by each Variation till the price does not exceed 50% of the agreemental value as specified in letter of acceptance / original agreement. For variation beyond the above the contractor shall be bound to execute, unless the Contractor promptly gives notice to the Engineer stating (with supporting particulars) that the Contractor cannot readily obtain the Goods required for the Variation. Upon receiving this notice, the Engineer shall cancel, confirm or vary the instruction.

Each Variation may include:

(a) changes to the quantities of any item of work included in the Contract,

(b) changes to the quality and other characteristics of any item of work,

(c) changes to the levels, positions and/or dimensions of any part of the Works,

(d) omission of any work unless it is to be carried out by others,

(e) any additional work, Plant, Materials or services necessary for the Permanent Works, including any associated Tests on Completion, boreholes and other testing and exploratory work, or

(f) changes to the sequence or timing of the execution of the Works.

(g) Re-work arising out of revision in drawings / designs / methodology of execution, after actual execution of work; excluding any re-work arising from any default of the Contractor, such as non-conformity to the quality of work /prescribed standards etc.,in the performance of obligations.

The Contractor shall not make any alteration and/or modification of the Permanent Works, unless and until the Engineer instructs or approves a Variation.

13.2 Value Engineering The Contractor may, at any time, submit to the Engineer a written proposal which (in the Contractor's opinion) will, if adopted, (i) accelerate completion, (ii) reduce the cost to the Employer of executing, maintaining or operating the Works, (iii) improve the efficiency or value to the Employer of the completed Works, or (iv) otherwise be of benefit to the Employer.

The proposal shall be prepared at the cost of the Contractor and shall include the items listed in Sub-Clause 13.3 [Variation Procedure].

If a proposal, which is approved by the Engineer, includes a change in the design of part of the Permanent Works, then unless otherwise agreed by both Parties:

(a) the Contractor shall design this part,

(b) sub-paragraphs (a) to (d) of Sub-Clause 4.1 [Contractor's General Obligations] shall apply, and

(c) if this change results in a reduction in the contract value of this part, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine a fee, which shall be included in the Contract Price. This fee shall be half (50%) of the difference between the following amounts:

  (i) such reduction in contract value, resulting from the change, excluding adjustments under Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost],and

  (ii) the reduction (if any) in the value to the Employer of the varied works, taking account of any reductions in quality, anticipated life or operational efficiencies.

However, if amount (i) is less than amount (ii), there shall not be a fee.

13.3 Variation Procedure

If the Engineer requests a proposal, prior to instructing a Variation, the Contractor shall respond in writing as soon as practicable, either by giving reasons why he cannot comply (if this is the case) or by submitting:

(a) a description of the proposed work to be performed and a programme for its execution,

(b) the Contractor's proposal for any necessary modifications to the programme according to Sub-Clause 8.3 [Programme] and to the Time for Completion, and

(c) the evaluation of the Variation shall be as specified in Clause 12.3 Evaluation.

The Engineer shall, as soon as practicable after receiving such proposal (under Sub-Clause 13.2 [Value Engineering] or otherwise), respond with approval, disapproval or comments. The Contractor shall not delay any work whilst awaiting a response.

Each instruction to execute a Variation, with any requirements for the recording of Costs, shall be issued by the Engineer to the Contractor, who shall acknowledge receipt.

Each Variation shall be evaluated in accordance with Clause 12 [Measurement and Evaluation], unless the Engineer instructs or approves otherwise in accordance with this Clause.

13.4 Payment in Applicable Currencies

If the Contract provides for payment of the Contract Price in more than one currency, then whenever an adjustment is agreed, approved or determined as stated above, the amount payable in each of the applicable currencies shall be specified. For this purpose, reference shall be made to the actual or expected currency proportions of the Cost of the varied work, and to the proportions of various currencies specified for payment of the Contract Price.

13.5 Provisional Sums

Each Provisional Sum shall only be used, in whole or in part, in accordance with the Engineer's instructions, and the Contract Price shall be adjusted accordingly. The total sum paid to the Contractor shall include only such amounts, for the work, supplies or services to which the Provisional Sum relates, as the Engineer shall have instructed. For each Provisional Sum, the Engineer may instruct:

(a) work to be executed (including Plant, Materials or services to be supplied) by the Contractor and valued under Sub-Clause 13.3 [Variation Procedure]; and/or

(b) Plant, Materials or services to be purchased by the Contractor, from a nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors]) or otherwise; and for which these shall be included in the Contract Price:

(i) the actual amounts paid (or due to be paid) by the Contractor, and

(ii) a sum for overhead charges and profit, calculated as a percentage of these actual amounts by applying the relevant percentage rate (if any) stated in the appropriate Schedule. If there is no such rate, the

percentage rate stated in the Contract Data shall be applied.

The Contractor shall, when required by the Engineer, produce quotations, invoices, vouchers and accounts or receipts in substantiation.

13.6 Day work

For work of a minor or incidental nature, the Engineer may instruct that a Variation shall be executed on a daywork basis. The work shall then be valued in accordance with the Daywork Schedule included in the Contract, and the following procedure shall apply. If a Daywork Schedule is not included in the Contract, this Sub-Clause shall not apply.

Before ordering Goods for the work, the Contractor shall submit quotations to the Engineer. When applying for payment, the Contractor shall submit invoices, vouchers and accounts or receipts for any Goods.

Except for any items for which the Daywork Schedule specifies that payment is not due, the Contractor shall deliver each day to the Engineer accurate statements in duplicate which shall include the following details of the resources used in executing the previous day's work:

(a) the names, occupations and time of Contractor's Personnel,

(b) the identification, type and time of Contractor's Equipment and Temporary Works, and

(c) the quantities and types of Plant and Materials used.

One copy of each statement will, if correct, or when agreed, be signed by the Engineer and returned to the Contractor. The Contractor shall then submit priced statements of these resources to the Engineer, prior to their inclusion in the next Statement under Sub-Clause 14.3 [Application for Interim Payment Certificates].

13.7 Adjustments for Changes in Legislation

The Contract Price shall be adjusted to take account of any increase or decrease in Cost resulting from a change in the Laws of the Country (including the introduction of new Laws and the repeal or modification of existing Laws) or in the judicial or official governmental interpretation of such Laws, made after the Base Date, which affect the Contractor in the performance of obligations under the Contract.

If the Contractor suffers (or will suffer) delay and/or incurs (or will incur) additional Cost as a result of these changes in the Laws or in such interpretations, made after the Base Date, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

(b) payment of any such Cost, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

In case there is a decrease in cost as a result of changes of Law by Legislation after the Base Date, the Engineer shall proceed in accordance with Sub Clause 3.5 (determination) to agree or determine these matters without waiting for Contractor's / Employer's Notice.

Notwithstanding the foregoing, the Contractor shall not be entitled to such an extension of time if the same shall already have been taken into account in determining an extension and such Cost shall not be separately paid if the same shall already have been taken into account in the indexing of any inputs to the table of adjustment data in accordance with the provisions of Sub-Clause 13.8.

13.8 Adjustment for changes in cost.

(A) Price Adjustment

The amounts payable to the Contractor and valued at base rates and prices pursuant to Sub-Clause 14.3 (a) hereof shall be adjusted in respect of the rise or fall in the indexed costs for labour, Contractor's Equipment and plant, materials and other inputs to the Works, by the addition or subtraction of the amounts determined by the formulae prescribed in this clause.

(B) Other Changes in Cost

To the extent that full compensation for any rise or fall in the costs to the Contractor is not covered by the provisions of this or other Clauses in the Contract, the unit rates and prices included in the Contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

(C): Adjustment Formulae

Contract price shall be adjusted for increase or decrease in rates and price of labour, materials fuels and lubricants in accordance with the

following principles and procedures as per formulae given below. The amount certified in each payment certificate is adjusted by applying respective price adjustment factor to the payment amounts due in each currency:

a. Price adjustment shall apply only for work carried out within the stipulated time or extensions granted by the Employer and shall not apply to work carried out beyond the stipulated time: price adjustment for extensions for reasons attributable to the Contractor, shall be paid in accordance with sub-clause 13.8 (H)

b. Price adjustment shall be calculated for the local and foreign components of the payment for the work done as per formulae given below; and

c. Following expressions and meanings are assigned to the work done during each month:

R = Total value of work done during the month. It would include the value of materials on which secured advance has been granted, if any during the month less the value of materials in respect of which the secured advance has been recovered, if any, during the month. This excludes the cost of work on items for which rates were fixed under variations clause (12 and 13) for which the escalation will be regulated as mutually agreed at the time of fixation of rate.

R_l = Portion of 'R' as payable in Indian Rupees

R_f = Portion of 'R' as payable in Foreign currency (at fixed exchange rates)

$R = R_l + R_f$

(i) Adjustment for Labour Component
Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula:

$V_L = P_l / 100 \times R_l \times (L_1 - L_0) / L_0$

V_L = Increase or decrease in the cost of work during the month under consideration due to changes in labour cost.

L_0 = Consumer price index Number for industrial workers All India – published in RBI (Reserve Bank of India) Bulletin in the month on the day 28 days prior to the closing date of submission of Bids.

L_1= Consumer price index Number for industrial workers All india- Published in RBI (Reserve Bank of india) Bulletin in the month on the day 28 days prior to the last day of the period to which a particular interim payment certificate is

related.

P_l= Percentage of Labour component of the work.

(ii) Adjustment for Cement Component

Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula:

$V_c = P_c / 100 \text{ X } R_I \text{ X } (C_1-C_0) / C_0$

V_c = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for cement.

C_0 = The index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for 'Manufacture of cement, lime and plaster'– published in RBI (Reserve Bank of India) Bulletin in the month on the day 28 days prior to the closing date of submission of Bids.

C_1 = The index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for 'Manufacture of cement, lime and plaster' – published in RBI (Reserve Bank of India) Bulletin in the month on the day 28 days prior to the last day of the period to which a particular interim payment certificate is related.

P_c = Percentage of Cement component of the work.

(iii) **Adjustment for Steel Component**

Price adjustment for increase or decrease in the cost of Steel procured by the contractor under different schedules of BOQ shall be paid in accordance with the following formula:

Formulae-I (for all schedules of BOQ except bill/schedule-2 B & 2 C):

$V_s = P_s / 100 \text{ X } R_I \text{ X } (S_1-S_0) / S_0$

V_s = Increase or decrease in the cost of work on the date under consideration due to changes in the rates for Steel.

S_0 = The average of rate of Rebars 10mm, Angles 75x75x6mm, Mild Steel Plates 10mm and Channel 150x75mmprovided by Joint Plant Committee for City specified in Contract Data forthe fortnight on the day 28 days prior to the closing date of submission of Bids.

S_1 = The average rate of Rebars 10mm,Angles 75x75x6mm, Mild Steel Plates 10mm and Channel 150x75mmprovided by Joint Plant Committee for City specified in Contract Datafor

the fortnight on the day 28 days prior to the last day of the period to which a particular interim payment certificate is related.

P_s = Percentage of Steel component of the work.

Formulae-II (for schedule-2 B of BOQ):

$V_s = P_s / 100 \times R_I \times (S_1 - S_0) / S_0$

$_s$=Increase or decrease in the cost of work on the date under consideration due to changes in the rates for Steel.

S_0 = The average rate for MS Plates 10mm and 25mm, provided by the Joint Plant Committee of the City mentioned in the contract Data in the fortnight on the day 28 days prior to the closing date of submission of Bids.

=The average rate for MS Plates 10mm and 25mm, provided by the Joint Plant Committee of the City mentioned in the contract Data in the fortnight on the day 28 days prior to the last day of the period to which a particular interim payment certificate is related.

=Percentage of Steel component of the work.

Formulae-III (for bill/schedule-2 C of BOQ):

$V_s = P_s / 100 \times R_I \times (S_1 - S_0) / S_0$

V_s = Increase or decrease in the cost of work on the date under consideration due to changes in the rates for Steel.

S_0 = The average rate for TMT 10mm and 25mm, provided by the Joint Plant Committee of the City mentioned in the contract Data in the fortnight on the day 28 days prior to the closing date of submission of Bids.

S_1 = The average rate for TMT 10mm and 25mm, provided by the Joint Plant Committee of the City mentioned in the contract Data in the fortnight on the day 28 days prior to the last day of the period to which a particular interim payment certificate is related.

P_s = Percentage of Steel component of the work.

(iv) Adjustment for Plant and Machinery and Spares Component

Price adjustment for increase or decrease in the cost of Plant and Machinery spares procured by the contractor shall be paid in accordance with the following formula:

$V_p = P_p / 100 \text{ X } R_I X (P_1-P_0) / P_0$

V_p = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for Plant and Machinery spares.

P_0 = The index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for 'Manufacture of machinery for mining, quarrying and construction'– published in RBI (Reserve Bank of India) Bulletin in the month on the day 28 days prior to the closing date of submission of Bids.

P_1 = The index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for 'Manufacture of machinery for mining, quarrying and construction' – published in RBI (Reserve Bank of India) Bulletin in the month on the day 28 days prior to the last day of the period to which a particular interim payment certificate is related.

P_p = Percentage of Plant and Machinery spares component of the work.

(v) Adjustment for Fuel and Lubricants

Price adjustment for increase or decrease in the cost of POL(fuel and lubricants) shall be paid in accordance with the following formula:

$V_f = P_f / 100 \text{ X } R_I X (F_1-F_0) / F_0$

V_f = Increase or decrease in the cost of work on the date under consideration due to changes in the rates for Fuel and lubricants.

F_0 = The average of official prices of Diesel available on the official website of 'Petroleum Planning and Analysis cell' under Ministry of Petroleum and Natural Gas for Delhi, Kolkata, Mumbai & Chennai, applicable on the day 28 days prior to the closing date of submission of Bids.

F_1 = The average of official price of Diesel available on the official website of 'Petroleum Planning and Analysis cell' under Ministry of Petroleum and Natural Gas for Delhi, Kolkata, Mumbai & Chennai, applicable on the day 28 days prior to the last day of the period to which a particular interim payment certificate is related.

P_f = Percentage of Fuel and Lubricants component of the work.

(vi) Adjustment for Other Non Ferrous Component

Price adjustment for increase or decrease in the cost of Other Non Ferrousmetalprocured by the contractor shall be paid in accordance with the following formula:

$V_{NF} = P_{NF} / 100 \times R_I \times (NF_1 - NF_0) / NF_0$

V_{NF} = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for Other Non Ferrousmetal.

NF_0 = The index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for 'Manufacture of non-ferrous metals incl. precious metals' – published in RBI (Reserve Bank of India) Bulletin in the month on the day 28 days prior to the closing date of submission of Bids.

NF_1 = The index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for 'Manufacture of non-ferrous metals incl. precious metals' – published in RBI (Reserve Bank of India) Bulletin in the month on the day 28 days prior to the last day of the period to which a particular interim payment certificate is related.

P_{NF} = Percentage of Other Non Ferrous metal component of the work.

(vii) Adjustment for Other local Materials

Price adjustment for increase or decrease in the cost of local materials other than Cement and Steel, Plant Machinery &Spares, POL and Other Non Ferrous Metals procured by the contractor shall be paid in accordance with the following formula:

$n = P_m / 100 \times R_i \times (M_1 - M_0) / M_0$

V_m = Increase or decrease in the cost of work during the month under consideration due to changes in the rates for local material other than cement, steel, plant spares and POL.

M_0 = The index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for All-Commodities-published in RBI (Reserve Bank of India) Bulletin in the month on the day 28 days prior to the closing date of submission of Bids.

M_1 = The index Number of Wholesale Prices in India by Groups and Sub Groups (Averages) for All -Commodities published in RBI (Reserve Bank of India) Bulletin in the month on the day 28 days prior to the last day of the

period to which a particular interim payment certificate is related

Pm =Percentage of local material component (other than cement, steel, plant, spares and POL) of the work.

(viii) Price Variation Clause for Contact and Catenary Wires

The Price payable shall be subject to adjustment, up or down, in accordance with the following formula:

$\mathbf{P_1 = Po + (L_2 - L_1)}$

Po = Quoted ex-works price of contact/catenary wire.

L_1 = Average LME cash settlement quotation for Copper Grade A, 60 days prior to the date of opening of the tender.

L_2 = L_2 will be minimum of (i) & (ii) given below:-

(i) LME rates prevailing on 90 days prior to the date of offering for inspection of each lot.

(ii) Invoiced rate in invoice of actual imports.

Notes:

1. For prevailing LME rates, certified copy of LME rate downloaded from official LME website will be accepted as documentary evidence.
2. LME rate in L_1 & L_2 will be converted to Indian Rupees at SBI's Selling Bills rate of exchange on the date 30 days prior to the date of opening of tender and date of delivery respectively.
3. In case index/price data are not available for particular date due to any reason then the index/price data shall be calculated by drawing a graph of Ist working day before and Ist working day after that particular date. As per graphic line price data arrived at on that particular date may be taken. .

(ix) Adjustment for Fabricated and Galvanized Steel Structures:

(Item Nos. as specified in special conditions). The price adjustment of these items shall be paid as follows:

Price Variation Clause for Fabricated and Galvanized Steel Structures for Railway Electrification Works

The Price payable shall be subject to adjustment, up or down, in accordance with the following formula:

$$P = \frac{P_o}{100}\left[11 + 57\frac{SBLR}{SBLR_o} + 09\frac{Zn}{Zn_o} + 23\frac{W}{W_o}\right]$$

= Price payable as adjusted in accordance with the above formula.

P_o = Price quoted

$SBLR_o$ = Price of Steel Blooms - Retail (refer notes)

This price is as applicable on the 1st working day of the month, one month prior to the deadline for submission of bids.

Zn_o = Price of electrolytic high grade zinc (refer notes).

This price is as applicable on the 1st working day of the month, one month prior to the deadline for submission of bids.

W_o = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Government of India(Base : 2001=100) (Refer notes). This index number is as applicable on the first working day of the month, three months prior to the deadline for submission of bids.

(For example, if date of tendering falls in May 2014, the applicable prices of Steel Blooms - Retail ($SBLR_o$) and electrolytic high grade zinc (Zn_o) should be for the month of April 2014 and all India average consumer price index number (W_o) should be for the month of February 2014.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA (PVC)/TLT/2014 one month prior to the deadline for submission of bids*.)*

SBLR = Price of Steel Blooms-Retail (refer notes).

This price is as applicable on the 1st working day of the month, two months prior to the date of delivery.

Zn=Prices of electrolytic high grade zinc (refer notes).

This price is as applicable on the first working day of the month, two months prior to the date of delivery.

W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt of India. (Base 2001=100) (refer notes).

This Index number is as applicable on the first working day of the

month, four month prior to the date of delivery.

(For example, if date of delivery falls in December 2014, the applicable prices of steel bloom – Retail (SBLR) and Zinc (Zn) should be for the month of October 2014 and all India average consumer price index number (W) should be for the month of August 2014.

The date of delivery is the date on which transmission line towers are notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.)

Notes:

(a) All prices of raw materials are exclusive of GST and any other taxes, duties, levies etc

(b) All prices are as on first working day of the month.

(c) The details of prices are as under:

1) The prices of Steel Blooms are the average Retail price of Blooms of size 150mm x 150mm of all cities in Rs/MT as published by Joint Plant Committee (JPC), Kolkata.

2) The price of electrolytic high grade zinc (in Rs/MT) is ex-works price as quoted by the primary producer.

3) Cost weight age of re-rolling / conversion charges is included in labor weightage (W)

Price Variation Clause for Traction Power Transformer complete with all accessories and components

The Price payable shall be subject to adjustment, up or down, in accordance with the following formula:

$$P = \frac{P_o}{100}\left[10 + 29\frac{C}{C_o} + 27\frac{ES}{ES_o} + 7\frac{IS}{IS_o} + 5\frac{IM}{IM_o} + 7\frac{TO}{TO_o} + 15\frac{W}{W_o}\right]$$

P = Price payable as adjusted in accordance with the above formula

P_o =Price quoted/Confirmed

C_o =Average LME settlement price of copper wire bars (refer notes)

This price is as applicable for the month, ONE month prior to the

date of bid opening.

ES_o= Price of CRGO Electrical Steel Lamination (refer notes)

This price is as applicable on the 1st working day of the month, ONEmonth prior to the dead line for submission of bids.

IS_o = Average price of steel plates 10 mm thick (refer notes).

This price is as applicable on the 1st working day of the month,ONE month prior to the dead line for submission of bids.

IM_o=Price of Insulating Materials (refer notes).

This price is as applicable on the 1st working day of the month, one month prior to the dead line for submission of bids.

TO_o = Price of Transformer Oil (Refer notes)

This price is as applicable on the 1st working day of the month, ONE month prior to the dead line for submission of bids.

W_o = All India average Consumer price index Number for industrial workers, as published by the labour bureau, ministry of labour, Govt. of India(base 2001 =100)

This index number is as applicable on the 1st working day of the month THREE months prior to the dead line for submission of bids.

(For example, if date of bid opening falls in June 2015, applicable prices of Copper Wire Bars (C_o),Transformer Oil (TO_o), Steel Plates 10 mm thick (IS_o), CRGO Electrical Steel Laminations (ES_o) and Insulating material (IM_o) should be as on 1st May 2015 and all India average consumer price index no. (W_o) should be for the month of March 2015.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA (PVC)/PWR_TRF/-/-ONE month prior to dead line for submission of bids.

C = Average LME settlement price of copper wire bars (refer notes).

This price is as applicable for the month, TWO months prior to the date of delivery.

ES= Price of CRGO Electrical Steel Lamination (refer notes).

This price is as applicable on the 1st working day for the month, TWO months prior to the date of delivery

IS = Average price of steel plates 10 mm thick (refer notes).

This price is as applicable on the 1stworking day of the month, ONE month prior to the date of delivery.

IM= Price of Insulating Materials (refer notes).

This price is as applicable on the 1st working day of the month, TWO months prior to the date of delivery.

TO= Price of transformer oil (Refer notes)

This price is as applicable on the 1st working day of the month, ONE month prior to the date of delivery

W = All India average Consumer price index Number for industrial workers, as published by the labour bureau, ministry of labour, Govt. of India(base 2001 =100)

This index number is as applicable on the 1st working day of the month THREE months prior to the date of delivery.

(For example, if date of delivery in terms of clause given below falls in December 2015, applicable prices of Copper Wire Bars (C), Insulating Material (IM), CRGO Electrical Steel Lamination (ES) should be as on 1stOctober 2015 and Transformer Oil (TO), Plates 10 mm thick (IS) should be 1st November 2015and All India average Consumer price index Number (W) should be for the month of September 2015.

The date of delivery is the date on which the transformer is notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

Notes:

(a) All prices of raw materials are exclusive of GST and any other taxes, duties, leviesetc. Transformers manufacturers import major raw materials like copper, CRGO steel sheets and Plates etc. The landed cost of these imported raw materials includes applicable custom duty but exclusive of GST and any other taxes, duties, levies.

(b) All prices are as on first working day of the month.

(c) The details of prices are as under:

1) The LME price of Copper Wire Bars (in Rs/MT) is the LME average settlement price of Copper Wire Bars converted into Indian Rupees with applicable average exchange rate of SBI of the month. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

2) The price of CRGO is the price of CRGO Electrical Steel Lamination in Rs./MT suitable for transformers of ratings above 10MVA or Voltage above 33KV up to 400 KV.

3) The price of steel is the average retail price of steel plates 10 mm thick as published by Joint Plant Committee (JPC) in Rs./MT as on 1st working day of the month.

4) The price of Insulating materials (in Rs./Kg) of pre-compressed pressboards of size 10 mm thick, 3200 mm x 4100 mm is the average C&F price in free currency per MT converted into Indian Rupees with applicable exchange rates prevailing as on 1st working day of the month as quoted by primary suppliers. This price is the landed cost, inclusive of applicable customs duty only but exclusive of countervailing duty.

5) The price of Transformer Oil (in Rs./K.Ltr.) is the average price on ex-refinery basis as quoted by primary producers for supply in drums.

(xi) PRICE VARIATION CLAUSE FOR SIGNALING & TELECOM CABLE

The price payable for signaling cables is variable as per Price Variation Formula given below:

For Signaling Copper Cables:
P= Po+CuF (Cu-Cuo) + CCFcu(CC-CCo) + FeF (Fe-Feo)

For Telecom Copper Cables For Jelly Filled, 0.9 mm dia, 6 quad cable
P= Po+CuF (Cu-Cuo) + AlFcu(Al-Alo) + CCFcu (CC-Cco) + FeF (Fe-Feo)

For Aluminum Power Cables:

P= Po+AlF (Al-Alo) + CCFAl(CC-CCo) + FeF (Fe-Feo)

Where,

P= 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 Signaling & Telecom cable

CCo= Price of PVC Compound in Rs. Per MT

AlF= Variation factor for Aluminum

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

CCFAl = Variation factor for PVC Compound for Aluminum 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 Aluminum rods (Properzi rods) in Rs. Per MT.

(Prices per MT for Cu, CC, Fe, Al as prevailing on 1st working 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 signaling cables. Accordingly, the PVC formula for some of the types of signaling cable is as given under:-

Underground Railway Signaling Cable unscreened and armoured copper conductor

i) Size 30 C x 1.5 sq.mm.
P=Po+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
P= Po+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
P= Po+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
P=Po+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
P= Po+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
P= Po+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
P=Po+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)
P= Po+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
P= Po+0.282 (Cu-Cuo)+0.371 (CC-CCo)+0.342 (Fe-Feo)

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

x) Size 2C x 2.5 sq.mm
P= Po+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, Aluminum power cable
P= Po+0.146 (Al-Alo)+0.303 (CC-CCo)+0.306 (Fe-Feo)

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

xii) For Jelly filled, 0.9mm dia, 6 quad cable
P = Po + 0.135 (Al-Alo) + 0.139 (Cu-Cuo) + 0.515 (CC-Cco) + 0.693 (Fe-Feo).

For PVC Compound Grade CW-22, is to be taken into consideration.
For armouring, value of steel flat strip of size 4mm x 0.8mm is to be taken into consideration.

For the remaining varieties of signaling cables, the formula shall be the same as in use on Indian railways.

(xii) Adjustment for Foreign Currency Component

(for each of the foreign currencies in which the contract price is payable)

a. The foreign currency component of each payment which is convertible into foreign currency at fixed exchange rate shall be adjusted in accordance with the following formula:

$VF_c = 0.85 \times R_f \times (Fe_1 - Fe_0) / Fe_0$

VF_c = Increase or decrease in the cost of work payable due to changes in the cost of foreign input.

Fe_0 = the index applicable for the foreign input(plant, material, engineer's salary etc. as the case may be) on the day 28 days prior to the date of submission of Bids, as published in the country of origin.

Fe_1 = corresponding index on the day 28 days prior to the last day of the period to which a particular interim payment certificate is related (average index in case indices are published at lesser intervals).

a. The bidder shall, in his tender, indicate the foreign input, (plant, material, engineer's salary etc.) and appropriate index, the source of which shall be a Government or Public Organization. The bidder shall also attach specimens of the publications of the last 12 months for information of the Employer. If this index is not acceptable to the Employer, then he will specify as alternative index and the source of publishing of that index.

b. If the bidder has requested payment in more than one foreign currency, R_f shall be suitably broken up and the formula applied separately to each currency component by taking into account and corresponding indices(index and currency belonging to the same country).

c. The currency of foreign exchange payment and the index shall belong to the same country.

(D) If the contractor changes the country of origin of the source of supply of any input to the works, he shall immediately notify the Engineer who shall modify the price adjustment provisions subsequent to such change

to reflect the relevant cost index from the actual country of origin of the input.

(E) If the currency in which the Contract price is expressed is different from the currencies of the sources of the relevant indices, the Engineer shall determine the correction to be applied in calculating the Price Adjustment Factor formula viii(a) in order to avoid distortions in the amount of price adjustment. Such correction shall be applied to the increment of price fluctuation in the base costs of the respective inputs and shall correspond to the ratio of the exchange rates between the respective currencies of the date of base indices and the date of current indices as defined in sub-clause viii(a).

(F) Sources of Indices

The sources of Indices for the foreign currency portion of the Contract (R_F) not stated in Sub-Clause 13.8 (C) shall be those as listed in the Contract Data, as approved by the Employer.

(G) Base, Current and provisional Indices:

Base, Current and Provisional Indices, the base cost indices or prices shall be those prevailing on the day 28 days prior to the closing date for submission of bids. current indices or prices shall be those prevailing on the day 28 days prior to last day of the period to which a particular interim payment certificate is related. if at any time the current indices are not available, provisional indices as determined by the engineer will be used, subject to subsequent correction of the amounts paid to the contractor when the current indices become available. the index numbers of various groups and sub groups as published by reserve bank of india in the rbi bulletin will be considered for this purpose.

(H) Limit of Price Adjustment

Provided that, in determining all such price adjustment in accordance with the aforesaid Sub-Clauses:

a. No account will be taken of any amount by which any cost incurred by the Contractor has been increased by default or negligence of the Contractor.

If the Contractor fails to complete the work within time for completion prescribed under Clause 8.2, the adjustment of

prices thereafter until the completion of the works shall be made using either the indices or prices, whichever is more favourable to the Employer, provided that if an extension of time is granted pursuant to Sub-Clause 8.4, the above position shall apply to the adjustments made after expiry of such extension of time.

(I) Percentages governing adjustments for change in cost

The percentages governing the price adjustment for the local currency portion (R_i) of the contract for various works is given in **Annexure 2.**

(J) Indices to be used in case of Interim Payment Certificate for a period more than a month

As per provisions of contract (Clause 14.3 of GCC) interim payments certificates are to be submitted by the contractor on monthly basis for the works/supply of items pertaining to a particular month. In such cases the monthly indices will be applied for the month on the day 28 days prior to the last day of the period to which a particular interim payment certificate is related. However, in case a bill is submitted for a period pertaining to more than a calendar month the average indices for those months on the day 28 days prior to last day of the period to which bill pertains and previous month(s) shall be used for calculation purpose.

14. Contract Price and Payment

14.1 The Contract Price

Unless otherwise stated in the Special Conditions of Contract:

(a) the Contract Price shall be agreed or determined under Sub-Clause 12.3 [Evaluation] and be subject to adjustments in accordance with the Contract;

(b) the Contractor shall pay all taxes, duties and fees required to be paid by him under the Contract, and the Contract Price shall not be adjusted for any of these costs except as stated in Sub-Clause 13.7 [Adjustments for Changes in Legislation];

(c) any quantities which may be set out in the Bill of Quantities or other Schedule are estimated quantities and are not to be taken as the actual and final quantities:

(i) of the Works which the Contractor is required to execute, or

(ii) for the purposes of Clause 12 [Measurement and Evaluation]; and

(d) the Contractor shall submit to the Engineer, within 28 days after the Commencement Date, a proposed breakdown of each lump sum

price in the Schedules, if applicable. The Engineer may take account of the breakdown when preparing Payment Certificates, but shall not be bound by it.

(e) It may be noted that in the event of the Contractor not making the due payments stated in sub-clause (b) above, and the concerned party puts up a claim with the Employer / Engineer, then the Employer / Engineer may make such payments and deduct the same from the sums due to the Contractor.

14.2 Advance Payment

14.2.1 Mobilization Advance

The Employer shall make payment, as an Interest bearing advance for mobilization, when the Contractor submits a guarantee in accordance with this Sub-Clause. The total advance payment, the number and timing of instalments (if more than one), and the applicable currencies and proportions, shall be as stated in the Contract Data.

Unless and until the Employer receives this guarantee, or if the total advance payment is not stated in the Contract Data, this Sub-Clause shall not apply.

The Engineer shall issue an interim payment certificate for the first installment of mobilisation advance after receiving an application for advance payment(under sub clause 14.3 [Application for Interim Payment Certificates]) and after the Employer receives (i) the Performance Security in accordance with Sub-Clause 4.2 [Performance Security] and (ii) a guarantee in amounts and currencies equal to the advance payment plus 10%. The next installment shall be released only when the contractor submits statement of having utilized the previous installment of mobilization advance and the Employer is satisfied that the utilization has been done in purposeful manner.

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14.2.2 Advance against Plant and Machinery

Interest bearing advance against plant and machinery, is payable for procurement of plant, equipment and machinery to be utilized specifically for the subject works, with following stage payments:

Stage-1: At the stage of Purchase Order	50% of the total permissible advance payment or actual payment made whichever is less, provided that the contractor has submitted copy of Purchase Order and the invoices duly certified from the firm and against a guarantee in amounts and currencies equal to the stage advance payment plus 10%.
Stage-2: At the stage of dispatch of the plant and	Cumulative 90% of the permissible advance payment or actual payment made whichever is less, against a guarantee in amounts and

machinery from manufacturing unit/ assembly point	currencies equal to the stage advance payment plus 10%. In case of domestic manufacture, provided the contractor has submitted GST invoice and Delivery Challan (Interstate movement Challan to the worksite) and in case of foreign manufacture provided the contractor has submitted Bill of Lading (BOL), Final Inspection Certificate and Transit Insurance.
Stage-3: At the stage of arrival of plant & machinery at the work site	Remaining of the permissible advance payment, against a guarantee in amounts and currencies equal to the stage advance payment plus 10%. Provided Plant & Machinery have reached the site, physical verification by Engineer and submission of commissioning certificate of the Plant & Machinery.

The total advance payment under this sub-clause, including the applicable currencies and proportions, shall be as stated in the Contract Data.

All such plant, equipment and machinery shall be used only for executing the works under this Contract. No such plant, equipment and machinery shall be removed from the site, unless advance equivalent to the advance against such machinery has been fully repaid and prior permission of the Engineer has been obtained.

The Engineer shall decide whether a particular plant, equipment or machinery is actually required to execute the work. No advance is payable against items identified as unnecessary. The plant and machinery admissible for advance payment and its valuation shall be done by the Engineer on following considerations;

i. New items: 80% of purchase price.
ii. Used or Second-hand items: Not to be considered.
iii. New Items valued at less than ₹ 10,00,000 each: Not to be considered.

14.2.3 Guarantees

Advances as mentioned in sub-clauses 14.2.1 & 14.2.2 above, shall be payable against acceptable Bank Guarantees from banks as specified in clause 4.2. The guarantees shall be in the form as given in Section 8 (Contract Forms) or in another form approved by the Employer. The Contractor shall ensure that the guarantees are valid and enforceable

until the advance amount paid as has been repaid, but its amount may be progressively reduced by the amount repaid by theContractor as indicated in the Payment Certificates. If the terms of the guarantee specify its expiry date, and the advance payment has not been repaid by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the guarantee until the advance payment has been repaid.

14.2.4 Recovery of Advances

Unless stated otherwise in the Contract Data, the advance payment shall be repaid through percentage deductions from the interim payments determined by the Engineer in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates], as follows:

(a) deductions shall commence in the next interim Payment Certificate following that in which the total of all certified interim payments (excluding the advance payment) exceeds 5 percent of the Accepted Contract Amount less Provisional Sums or passage of six months from the date of release of first advance payment, whichever is earlier; and

(b) deductions shall be made for accrued interest on the advance up to the month and advance at the rate stated in the Contract Data of the amount of each Interim Payment Certificate (excluding the advance payment and deductions and repayments of retention) in the currencies and proportions of the advance payment until such time as the advance payment and accrued interest has been repaid; provided that the advance payment and accrued interest shall be completely repaid prior to the time when 80 percent of the Accepted Contract Amount has beencertified for payment. If the amount of interim payment certificate is not sufficient for recovery of accrued interest or in the opinion of the Employer satisfactory progress is not being achieved by the contractor, then the contractor will have to deposit the accrued interest and return the mobilisation advance in part or in full as demanded by the Employer, failing which Employer shall have the right to encash the Bank Guarantee(s)

The contractor shall always have the option to start repayment earlier and/or to complete the repayment earlier than the due date.

If the advance payment has not been repaid prior to the issue of the Taking-Over Certificate for the Works or prior to termination under Clause 15 [Termination by Employer], Clause 16 [Suspension and Termination by Contractor] or Clause 19 [Force Majeure] (as the case may be), the whole of the balance then outstanding shall immediately become due and payable by the Contractor to the Employer.

14.2.5 Advances to be Used only for This Work

The advances shall be used by the Contractor strictly for the purpose of the Contract, and for the purpose for which they are paid. Under no circumstances, shall the advances be diverted for other purposes. Any such diversion shall be construed as a breach of the Contract and the Contractor shall be asked to return the advance at once and pay interest at 15% per annum till the advance is recovered back from him. The Contractor shall return the advance and pay the interest in one go without demur.

Employer retains the right for any other remedy prescribed for breach of Contract in this regard.

The Contractor, if required by the Engineer shall provide the details of utilisation of Mobilisation advance.

14.3 Application for Interim Payment Certificates

The Contractor shall submit a Statement in six copies to the Engineer in accordance with the payment procedure specified by the Engineer, after the end of each month, in a form approved by the Engineer, showing in detail the amounts to which the Contractor considers himself to be entitled, together with supporting documents which shall include the report on the progress during this month in accordance with Sub-Clause 4.21 [Progress Reports] and Record Measurement Sheets.

The Statement shall include the following items, as applicable, which shall be expressed in the various currencies in which the Contract Price is payable, in the sequence listed:

(a) the estimated contract value of the Works executed and the Contractor's Documents produced up to the end of the month (including Variations but excluding items described in sub-paragraphs (b) to (g) below);

(b) any amounts to be added and deducted for changes in legislation and changes in cost, in accordance with Sub-Clause 13.7 [Adjustments for Changes in Legislation] and Sub-Clause 13.8 [Adjustments for Changes in Cost];

(c) any amount to be deducted for retention, calculated by applying the percentage of retention stated in the Contract Data to the total of the above amounts, until the amount so retained by the Employer reaches the limit of Retention Money (if any) stated in the Contract Data;

(d) Any amounts to be added and deducted for the advance payments and repayments in accordance with sub clause 14.2 [Advance Payment];

(e) any amounts to be added and deducted for Plant and Materials in

accordance with Sub-Clause 14.5 [Plant and Materials intended for the Works];

(f) any other additions or deductions which may have become due under the Contract or otherwise, including those under Clause 20 [Claims, Disputes and Arbitration]; and

(g) the deduction of amounts certified in all previous Payment Certificates.

(h) for invoicing as per GST Laws, the estimated contract value of the Works executed in terms of (a) above and any amounts added or deducted as per (b), (e) to (g) above is to be broken up in two components i.e. (i) the base amount excluding GST (ii) GST component (calculated at the rate for works contract service as per GST Laws).

(i) Statement of interim payments certificates should be submitted by the Contractor to the Engineer by the 7th day of each month for the work executed upto the end of the previous month.

(j) An amount to be deducted for the payments to be made to different Departments towards payments liable to be made by the Contractor.

14.4 Schedule of Payments

If the Contract includes a schedule of payments specifying the instalments in which the Contract Price will be paid, then unless otherwise stated in this schedule:

(a) the instalments quoted in this schedule of payments shall be the estimated contract values for the purposes of sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates];

(b) Sub-Clause 14.5 [Plant and Materials intended for the Works] shall not apply; and

(c) if these instalments are not defined by reference to the actual progress achieved in executing the Works, and if actual progress is found to be less than that on which this schedule of payments was based, then the Engineer may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine revised instalments, which shall take account of the extent to which progress is less than that on which the instalments were previously based.

If the Contract does not include a schedule of payments, the Contractor shall submit non-binding estimates of the payments which he expects to become due during each quarterly period. The first estimate shall be submitted within 42 days after the Commencement Date. Revised estimates shall be submitted at quarterly intervals, until the Taking-Over Certificate has been issued for the Works.

14.5 Plant and Materials intended for the Works

If this Sub-Clause applies, Interim Payment Certificates shall include, under sub-paragraph (e) of Sub-Clause 14.3:

(k) an amount for Plant and Materials which have been sent to the Site for incorporation in the Permanent Works, and

(ii) a reduction when the contract value of such Plant and Materials is included as part of the Permanent Works under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates].

If the lists referred to in sub-paragraphs (b)(i) or (c)(i) below are not included in the Contract Data, this Sub-Clause shall not apply.

The Engineer shall determine and certify each addition if the following conditions are satisfied:

(a) the Contractor has:

(i) kept satisfactory records (including the orders, receipts, Costs and use of Plant and Materials) which are available for inspection, and

(ii) submitted a statement of the Cost of acquiring and delivering the Plant and Materials to the Site, supported by satisfactory evidence;

and either:

(b) the relevant Plant and Materials:

(i) are those listed in the Schedules for payment when shipped,

(ii) have been shipped to the Country, en route to the Site, in accordance with the Contract; and

(iii) are described in a clean shipped bill of lading or other evidence of shipment, which has been submitted to the Engineer together with evidence of payment of freight and insurance, any other documents reasonably required, and a bank guarantee in a form and issued by an entity approved by the Employer in amounts and currencies equal to the amount due under this Sub-Clause: this guarantee may be in a similar form to the form referred to in Sub-Clause 14.2 [Advance Payment] and shall be valid until the Plant and Materials are properly stored on Site and protected against loss, damage or deterioration;

or

(c) the relevant Plant and Materials:

(i) are those listed in the Schedules for payment when delivered to the Site,

(ii) the original 'Invoice' and the original 'Inspection Certificate' by the approved Inspection agency marked 'for payment' is furnished with the Application for IPC [sub-Clause 14.3].

(iii) have been delivered to and are properly stored on the Site, are protected against loss, damage or deterioration, and appear to be in

accordance with the Contract.

The additional amount to be certified shall be the equivalent of eighty percent of the Engineer's determination of the cost of the Plant and Materials (including delivery to Site), taking account of the documents mentioned in this Sub-Clause and of the contract value of the Plant and Materials. The amount shall be certified on receipt of an Indemnity Bond for the stated amount in the Form approved by the Employer.

The currencies for this additional amount shall be the same as those in which payment will become due when the contract value is included under sub-paragraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates]. At that time, the Payment Certificate shall include the applicable reduction which shall be equivalent to, and in the same currencies and proportions as, this additional amount for the relevant Plant and Materials.

14.6 Issue of Interim Payment Certificates

No amount will be certified or paid until the employer has received and approved the performance security. Thereafter, the Engineer shall within two days after receiving a statement and supporting documents (including Contractor's certificate in terms of Sub-Clause 6.22 (ii)), issue to the Employer a provisional interim payment certificate which shall state the amount which the Engineer determines to be due after preliminary check as per RVNL's procedure order. After this the Engineer shall, within 28 days after receiving a statement and supporting documents, issue to the employer an Interim Payment Certificate which shall state the amount which the Engineer fairly determines to be due, with supporting particulars.

However, prior to issuing the Taking-Over Certificate for the Works, the Engineer shall not be bound to issue the Interim Payment Certificate in an amount which would (after retention and other deductions) be less than the minimum amount of Interim Payment Certificates (if any) stated in the Contract Data. In this event, the Engineer shall give notice to the Contractor accordingly.

An Interim Payment Certificate shall not be withheld for any other reason, although:

(a) if anything supplied or work done by the Contractor is not in accordance with the Contract, the cost of rectification or replacement may be withheld until rectification or replacement has been completed; and/or

(b) if the Contractor was or is failing to perform any work or obligation in accordance with the Contract, and had been so notified by the Engineer, the value of this work or obligation may be withheld until the work or obligation has been performed.

The Engineer may in any Payment Certificate make any correction or modification that should properly be made to any previous Payment Certificate. A Payment Certificate shall not be deemed to indicate the Engineer's

acceptance, approval, consent or satisfaction.

14.7 Payment

The Employer shall pay to the Contractor:

(a) the first instalment of the advance payment within 42 days after issuing the Letter of Acceptance or within 21 days after receiving the documents in accordance with Sub-Clause 4.2 [Performance Security] and Sub-Clause 14.2 [Advance Payment], whichever is later;

(b) (i) After preliminary scrutiny and certifications by the Engineer, payment of 70% of the certified net payment due (after recoveries and deductions), shall be made by the Employer within 10 days of receiving a statement and supporting documents by the Engineer subject to the condition that last interim payment certificate has been settled after detailed check. In the event of the contractor submitting bills based on false measurements, Project Director should issue a written warning to him to the effect that the facility of 70% payment without detailed check will be withdrawn in future. If the contractor repeats the misconduct this facility should be withdrawn.

(ii) The amount certified in each Interim Payment Certificate within 56 days after the Engineer receives the Statement and supporting documents. Any discrepancy shall be rectified in the next payment to the Contractor; and

(c) the amount certified in the Final Payment Certificate within 56 days after the Employer receives this Payment Certificate or, the undisputed amount shown in the Final Statement, within 56 days after the date of notification of the suspension in accordance with Sub-Clause 16.2.

Payment of the amount due, unless specified in the Contract Data, shall be made in INR into the bank account, nominated by the Contractor except for the Contract where the Contractor has opted for payment through Letter of Credit (LC) arrangement. In such a case, the procedure for payment shall be as prescribed in clause 14.7.1 below.

However, in case of JV, direct payment to individual JV partners shall be made on joint certification (about the net amounts payable to individual partners) by the authorized representative of the JV and concerned respective authorized representative of individual JV partners, after making requisite recoveries/deductions from the gross payment. In case of any dispute regarding the net amounts payable to individual partners, the Engineer shall decide the same on the basis of the execution of items of works under Schedules/Bills indicated in the JV agreement as the responsibility of execution of each JV partner. Payment to individual JV partners shall be treated as payment made to the JV. The said payment shall not alter any obligation of the JV and its individual Partners under the Agreement and their obligations under the agreement shall remain

joint and several.

A foreign company (either single entity or JV partner), shall have to submit proof of having opened their project office in India before any payment (including advance payment) is released to such a company. The required proof here shall be a copy of the report containing information as per format prescribed by Reserve Bank of India submitted to the Director General of Police (DGP) of the state concerned in which project office has been established.

14.7.1 **Procedure for payment through LC:**

(i) The LC shall be a sight LC.

(ii) 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.

(iii) The Employer's Bank and its nodal branch for issue of LCs based on requests received from Employer Accounts Units shall be as indicated in the Contract Data. The Branch office of the Employer's Bank, where the Employer Accounts Office has its Account, as indicated in the Contract Data, 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 present incidental cost @ 0.15% per annum of LC value or any increase/decrease by the banks for issue of LC and operation thereof shall be borne by the contractor and shall be recovered from his Interim Payment Certificates.

(iv) The LC shall be opened initially for duration of 180 to 365 days in consultation with contractor. The LC shall be extended time to time as per the progress of the contract, on the request of the contractor. The value of LC to be opened initially as well as extended thereafter shall be finalized by the engineer in consultation with the contractor on the basis of expected progress of work.

(v) The LC terms and conditions shall inter-alia indemnify and save harmless the Employer from and against all losses, claims and demands of every nature and description brought or recovered against the Employer 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 Employer on this account shall be considered as reasonable compensation and paid by contractor.

(vi) The LC terms and conditions shall inter-alia provide that Employer will issue a Document of Authorisation (in the format decided in consultation with the Employer's Bank) after passing the Interim Payment Certificate for completed work, to enable contractor to claim the authorized amount from their bank.

(vii) The acceptable, agreed upon document for payments to be released under the LC shall be the Document of Authorisation.

(viii) The Document of Authorisation shall be issued by Employer Accounts Office against each Interim Payment Certificate passed by Employers.

(ix) On issuance of document of Authorisation, a copy of Document of Authorization shall be sent to the contractor. A copy of Document of Authorisation shall also be sent by Employer Accounts Office to Employer's bank.

(x) On receipt of Document of Authorization, the contractor shall present his claim to his bank (advising Bank) for necessary payments as per LC terms and conditions. The claim shall comprise of copy of Document of Authorization, Bill of Exchange and Payment Certificate.

(xi) The payment against LC shall be subject to verification from Employer's Bank .

(xii) The contractor's bank (advising bank) shall submit the documents to the Employer's Bank .

(xiii) The Employer's bank (Issuing Bank) shall, after verifying the claim so received w.r.t. the Document of Authorisation received from Employer Accounts Office release the payment to contractor's bank (advising bank) for crediting the same to contractor's account.

(xiv) Any number of Interim Payment Certificates can be dealt within one LC, provided the sum total of payments to contractor is within the amount for which LC has been opened.

(xv) The LC shall be closed after the release of Final Payment certificate including PVC amount, if any, to the contractor.

(xvi) In case of JV, LC shall be opened in the name of JV and option of direct payment to individual JV partners through LC shall not be permissible.

14.8 Delayed Payment

If the Contractor does not receive payment in accordance with Sub-Clause 14.7 [Payment], the Contractor shall be entitled to receive interest on the amount unpaid during the period of delay. This period shall be deemed to commence on the date for payment specified in Sub-Clause 14.7 [Payment], irrespective (in the case of its sub-paragraph (b)) of the date on which any Interim Payment Certificate is issued.

Unless otherwise stated in the Special Conditions of Contract, the interest amount be calculated at the rate specified in the Contract Data. If no rate is specified in the Contract Data the clause shall not apply.

The Contractor shall be entitled to this payment without formal notice or certification, and without prejudice to any other right or remedy.

14.9 Payment of Retention Money

The Retention Money shall be certified and paid with the final payment certificate or bank guarantee against retention money shall be released, after making required adjustments for any amount due to the Employer including recovery for shortage/excess materials, if any **(except those quantities which become surplus due to change in planning/scheme by Railway/RVNL) in case the recovery for surplus/excess materials is still balance after adjusting the amount payable in the final payment certificate.**

The contractor shall be entitled to substitute a bank guarantee in the form approved by the Employer with the retention money amount recovered up to the date of request. Such substitution shall be permissible maximum up to 3 times. The Bank Guarantee shall be valid up to end of Defect Liability Period. In case of extension of date of completion of contract, the Contractor shall extend the validity of the Bank Guarantee(s) until the revised end of Defect Liability Period.

14.10 Statement at Completion

Within 84 days after receiving the Taking-Over Certificate for the Works, the Contractor shall submit to the Engineer six copies of a Statement at completion with supporting documents, in accordance with Sub-Clause 14.3 [Application for Interim Payment Certificates], showing:

(a) the value of all work done in accordance with the Contract up to the date stated in the Taking-Over Certificate for the Works,

(b) any further sums which the Contractor considers to be due, and

(c) an estimate of any other amounts which the Contractor considers will become due to him under the Contract. Estimated amounts shall be shown separately in this Statement at completion.

The Engineer shall then certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates].

Within 56 days after receiving the Performance Certificate, the Contractor shallsubmit, to the Engineer, six copies of a draft final statement as per procedure prescribed by the Engineer, with supporting documents showing in detail in a form approved by the Engineer:

14.11 Application for Final Payment Certificate

Within 56 days after receiving the Performance Certificate, the Contractor shall submit, to the Engineer, six copies of a draft final statement as per procedure prescribed by the Engineer, with supporting documents (including Contractor's certificate in terms of Sub-Clause 6.22 (ii)) showing in detail in a form approved by the Engineer:

(a) the value of all work done in accordance with the Contract, and

(b) any further sums which the Contractor considers to be due to him under the Contract or otherwise, and

(c) the final statement of local content after completion of works in Form-MII provided in Section 4 Bidding Forms.

If the Engineer disagrees with or cannot verify any part of the draft final statement, as per procedure prescribed by the Engineer the Contractor shall submit such further information as the Engineer may reasonably require and shall make such changes in the draft as may be agreed between them. The Contractor shall then prepare and submit to the Engineer the final statement as agreed. This agreed statement is referred to in these Conditions as the "Final Statement".

However if, following discussions between the Engineer and the Contractor and any changes to the draft final statement which are agreed, it becomes evident that a dispute exists, the Engineer shall deliver to the Employer (with a copy to the Contractor) an Interim Payment Certificate for the agreed parts of the draft final statement. Thereafter, if the dispute is finally resolved under Sub-Clause 20.3 [Obtaining Dispute Board's Decision] or Sub-Clause 20.2 [Amicable Settlement], the Contractor shall then prepare and submit to the Employer (with a copy to the Engineer) a Final Statement."

14.12 Discharge

When submitting the Final Statement, the Contractor shall submit a discharge which confirms that the total of the Final Statement represents full and final settlement of all moneys due to the Contractor under or in connection with the Contract. This discharge may state that it becomes effective when the Contractor has received the Performance Security and the outstanding balance of this total, in which event the discharge shall be effective on such date.

14.13 Issue of Final Payment Certificate

Within 28 days after receiving the Final Statement and discharge in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], the Engineer shall issue, to the Employer, the Final Payment Certificate which shall state:

(a) the amount which he fairly determines is finally due, and

(b) after giving credit to the Employer for all amounts previously paid by the Employer and for all sums to which the Employer is entitled, the balance

(if any) due from the Employer to the Contractor or from the Contractor to the Employer, as the case may be.

If the Contractor has not applied for a Final Payment Certificate in accordance with Sub-Clause 14.11 [Application for Final Payment Certificate] and Sub-Clause 14.12 [Discharge], the Engineer shall request the Contractor to do so. If the Contractor fails to submit an application within a period of 28 days, the Engineer shall issue the Final Payment Certificate for such amount as he fairly determines to be due.

14.14 Cessation of Employer's Liability

The Employer shall not be liable to the Contractor for any matter or thing under or inconnection with the Contract or execution of the Works, except to the extent that the Contractor shall have included an amount expressly for it:

(a) in the Final Statement and also

(b) (except for matters or things arising after the issue of the Taking-Over Certificate for the Works) in the Statement at completion described in Sub-Clause 14.10 [Statement at Completion].

However, this Sub-Clause shall not limit the Employer's liability under his indemnification obligations, or the Employer's liability in any case of fraud, deliberate default or reckless misconduct by the Employer.

14.15 Currencies of Payment

The Contract Price shall be paid in Indian Rupees (INR).

15. Termination by Employer

15.1 Notice to Correct

If the Contractor fails to carry out any obligation under the Contract as mentioned below, but not limited to, the Engineer/ Employer may serve the contractor with a 14 days notice in writing calling upon the contractor to make good the failure and to remedy it. If the contractor;

(a) fails to comply with Sub-Clause 4.2 [Performance Security],

(b) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract,

(c) without reasonable excuse fails to:

(i) proceed with the Works in accordance with Clause 8 [Commencement, Delays and Suspension], or

(ii) comply with a notice issued under Sub-Clause 7.5 [Rejection] or Sub-Clause 7.6 [Remedial Work], within 28 days after receiving it, or

(iii) adhere to the agreed programme of work / activity on the critical

path, by a margin of 10% of the stipulated period, or

(iv) take steps to deploy competent and adequate number of personnel, and equipment to achieve progress as per agreed programme or

(v) adhere to the instructions of Engineers/Employer persistently or

(vi) comply any provision of the contract or

(vii) provide the Engineer/Employer or their representative proper facilities for inspecting the works or any part thereof as required, under Clause 7.3 (Inspection) and 7.4 (Testing).

(d) subcontracts the whole or major part of the Works or assigns the Contract without prior written consent of the Employer.,

If the contractor does not, within 14 days of receipt of notice under this sub-clause, proceed to make good his default in so far as the same is capable of being made good and carry on the work of complying with such direction as contained in the notice under sub clause 15.1, to the entire satisfaction of the Engineer/Employer, the Employer shall be entitled to take action under sub-clause 15.1.1 or 15.1.2 or 15.2 below.

15.1.1 In case of contractor's repeated failure to adhere to the agreed program, and whereas the contractor has been served with a Notice to Correct under Clause 15.1 of GCC, if the contractor approaches RVNL with a revised program with specific monthly physical and financial targets along with the proposal to deploy matching inputs in the form of manpower and other resources to the satisfaction of the Employer, then the Employer may consider whether to proceed with termination of the contract under Clause 15.2 of GCC or to continue with the contract. However, the request to continue with the contract shall only be considered if the contractor supports his earnestness to adhere to the revised program by submitting additional Performance Security in the form of Bank Guarantee(s) of specified number and value as decided by the Employer (total value of which will not exceed 10% of the contract price). The encashment of these additional Bank Guarantee(s) shall be linked with the non achievement of agreed physical/financial targets agreed upon by the Contractor and the Employer.

15.1.2 In case the contractor's failure is limited to only some of the works, and in response to Notice to Correct under Clause 15.1 of GCC, the contractor approaches the Employer that such works may be offloaded from him and got executed through another agency and additional cost incurred, if any, should be recovered from his dues, the Employer, on being convinced that the anticipated additional cost for such works will not be substantial and can be recovered from the dues of the contractor and that such offloading will help in improving the overall progress of the project, may agree to such offloading without any repercussion on the performance security and/or additional bank guarantees, if any, submitted by the contractor. However, the Employer will not be under any compulsion to agree to such

a request. The Contractor shall be informed of the LOA issued to other agency(ies) for such works.

In case the contractor does not approach the employer for offloading but the Employer is convinced that:

(i) offloading of some works will help in improving the progress of the project;

(ii) termination/part termination of the contract at this stage will not be in the interest of the project;

(iii) the anticipated additional cost for such works will not be substantial and can be recovered from the dues of the contractor;

The Employer may issue 7 days notice to the Contractor stating the resources required to be deployed against each work. If the contractor fails to deploy the required resources as indicated in the notice, the employer shall offload such works and proceed with getting the works executed through other agency(ies). The Contractor shall be informed of the LOA issued to other agency(ies) for such works.

Offloading under the sub clause 15.1.2 shall be without any repercussion on the performance security and/or additional bank guarantees, if any, submitted by the contractor. The Contractor would have no future claim on this account and the extra expenditure so incurred, if any, by the Employer in getting the offloaded work done, shall be recovered from subsequent payment certificates or any other dues of the contractor.

15.2 Termination by Employer

The Employer shall be entitled to terminate the Contract as a whole or any part or parts (as may be specified in the Notice of Termination under any of the above Sub-Clause issue) if the Contractor:

(a) fails to comply with the directions contained in the notice under Sub-Clause 15.1 [Notice to Correct],

(b) becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against it by Court or Statutory Authority him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events, or

(c) gives or offers to give (directly or indirectly) to any person any bribe, gift, gratuity, commission or other thing of value, as an inducement or reward:

(i) for doing or forbearing to do any action in relation to the Contract, or

(ii) for showing or forbearing to show favour or disfavour to any person in

relation to the Contract,

or if any of the Contractor's Personnel, agents or Subcontractors gives or offers to give (directly or indirectly) to any person any such inducement or reward as is described in this sub-paragraph (c). However, lawful inducements and rewards to Contractor's Personnel shall not entitle termination

In any of these events or circumstances, the Employer may, by Notice Terminate the contract with immediate effect.

The Employer's election to terminate the Contract shall not prejudice any other rights of the Employer, under the Contract or otherwise.

The Contractor shall remove all his plants and machinery from the site then leave the Site and deliver any required Goods, all Contractors' Documents, and other design documents made by or for him, to the Engineer within 7 days from the issue of Notice of Termination, failing which Delay Damages as prescribed for delay in completion of works shall be imposed as per provision of clause 8.7. However, the Contractor shall use his best efforts to comply immediately with any reasonable instructions included in the notice of Termination (i) for the assignment of any subcontract, and (ii) for the protection of life or property or for the safety of the Works.

After termination, the Employer may complete the Works and/or arrange for any other entities to do so. The Employer and these entities may then use any Goods, Contractor's Documents and other design documents made by or on behalf of the Contractor for completing the work.

15.3 Valuation at Date of Termination

As soon as practicable after a notice of termination under Sub-Clause 15.2 [Termination by Employer] has taken effect, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine the value of the Works, Goods and Contractor's Documents, and any other sums due to the Contractor for work executed in accordance with the Contract. For this purpose, the contractor shall be notified the date for witnessing of measurements and handing over of the materials for which contractor has already been paid. In case the contractor fails to attend or send a representative even after such notice, the Engineer shall ex parte proceed with measurements of the works executed and taking over of plants and materials etc. for which payment has already been made to the contractor, which shall be treated as final.

15.4 Payment after Termination

After a notice of termination under Sub-Clause 15.2 [Termination by Employer] has taken effect, the Employer may:

(a) proceed in accordance with Sub-Clause 2.5 [Employer's Claims],

(b) encash the Performance Guarantee and forfeit the Performance Security:

i) In full including additional Performance Guarantee amount if any taken in terms of sub clause 35.5 of ITB and not due for release on the date of issue of termination letter, in case of termination of the contract as a

whole; Or

ii) in part/parts proportionate to the contract price of the bill/schedule to which the terminated part of work belongs i.e.

P = (A x B) ÷ C where,

P = Proportionate Bank Guarantee Amount

A = Contract Price of the particular bill/schedule to which the terminated part of work belongs

B = Performance Guarantee amount in terms of GCC sub clause 4.2

C = Total Contract Price

Plus additional Performance Guarantee amount if any taken in terms of sub clause 35.5 of ITB and not due for release on the date of issue of termination letter against that particular bill/Schedule to which the terminated part of the work belongs in case of termination in part/parts.

(c) forfeit the deductible Retention Money as per clause 14.3 (c) on the cumulative amount payable for all the works executed till the date of termination in case of termination of the contract as a whole.

In case of termination of the contract in part/parts, amount of Retention Money deductible as per clause 14.3 (c) on the cumulative bill amount payable for the work executed till the date of termination for the bill(s)/Schedule(s) to which the terminated part of the work belongs

(d) release any payment due to the contractor for works executed prior to termination and evaluation under clause 15.3 (valuation at date of termination, however, if by this time the Contractor has failed to make a payment due to the Employer, the same will be deducted from the payment due and any balance remaining shall then be paid to the Contractor.).

15.5 Employer's Entitlement to Termination for Convenience

The Employer shall be entitled to terminate the Contract, at any time for the Employer's convenience, by giving notice of such termination to the Contractor. The termination shall take effect 28 days after the later of the dates on which the Contractor receives this notice or the Employer returns the Performance Security. The Employer shall not terminate the Contract under this Sub-Clause in order to execute the Works himself or to arrange for the Works to be executed by another contractor or to avoid a termination of the Contract by the Contractor under Clause 16.2 [Termination by Contractor].

After this termination, the Contractor shall proceed in accordance with Sub-Clause 16.3 [Cessation of Work and Removal of Contractor's Equipment] and shall be paid in accordance with Sub-Clause 19.1 [Payment and Release in case of Optional Termination].

15.6 Corrupt or Fraudulent Practices

If the Employer determines that the Contractor has engaged in corrupt, fraudulent, collusive or coercive practices, in competing for or in executing the Contract, then the Employer may, after giving 14 days notice to the Contractor,

terminate the Contractor's employment under the Contract and expel him from the Site, and the provisions of Clause 15 shall apply as if such expulsion had been made under Sub-Clause 15.2.

For the purposes of this Sub-Clause:

(a) *"corrupt practice" means the offering, giving, receiving of soliciting of any thing of "value to influence the action of a public official in the procurement process or in the Contract execution.*

(b) *"fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of the Contract to the detriment of the Employer, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.*

(c) "collusive practice" means a scheme or arrangement between two or more bidders, with or without the knowledge of the Employer, designed to establish bid prices at artificial, noncompetitive levels.

(d) *"coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract.*

16. Suspension and Termination by Contractor

16.1 Contractor's Entitlement to Suspend Work

If the Engineer fails to certify in accordance with Sub-Clause 14.6 [Issue of Interim Payment Certificates] or the Employer fails to comply with Sub-Clause 2.4 [Employer's Financial Arrangements] or Sub-Clause 14.7 [Payment], the Contractor may, after giving not less than 21 days' notice to the Employer, suspend work (or reduce the rate of work) unless and until the Contractor has received the Payment Certificate, reasonable evidence or payment, as the case may be and as described in the notice.

The Contractor's action shall not prejudice his entitlements to interest under Sub-Clause 14.8 [Delayed Payment] and to termination under Sub-Clause 16.2 [Termination by Contractor].

If the Contractor subsequently receives such Payment Certificate, evidence or payment (as described in the relevant Sub-Clause and in the above notice) before giving a notice of termination, the Contractor shall resume normal working as soon as is reasonably practicable.

If the Contractor suffers delay and/or incurs Cost as a result of suspending work (or reducing the rate of work) in accordance with this Sub-Clause, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

(b) payment of any such Cost plus profit, which shall be included in the Contract Price.

After receiving this notice, the Engineer shall proceed in accordance with Sub-

Clause 3.5 [Determinations] to agree or determine these matters.

16.2 Termination by Contractor

The Contractor shall be entitled to terminate the Contract if:

(a) the Contractor does not receive the reasonable evidence within 42 days after giving notice under Sub-Clause 16.1 [Contractor's Entitlement to Suspend Work] in respect of a failure to comply with Sub-Clause 2.4 [Employer's Financial Arrangements],

(b) the Engineer fails, within 56 days after receiving a Statement and supporting documents, to issue the relevant Payment Certificate,

(c) the Contractor does not receive the amount due under an Interim Payment Certificate within 42 days after the expiry of the time stated in Sub-Clause 14.7 [Payment] within which payment is to be made (except for deductions in accordance with Sub-Clause 2.5 [Employer's Claims]),

(d) a prolonged suspension affects the whole of the Works as described in Sub-Clause 8.11 [Prolonged Suspension], or

(e) the Employer becomes bankrupt or insolvent, goes into liquidation, has a receiving or administration order made against him, compounds with his creditors, or carries on business under a receiver, trustee or manager for the benefit of his creditors, or if any act is done or event occurs which (under applicable Laws) has a similar effect to any of these acts or events.

In any of these events or circumstances, the Contractor may, upon giving 14 days' notice to the Employer, terminate the Contract. However, in the case of sub-paragraph (d) or (e), the Contractor may by notice terminate the Contract immediately.

The Contractor's election to terminate the Contract shall not prejudice any other rights of the Contractor, under the Contract or otherwise.

16.3 Cessation of Work and Removal of Contractor's Equipment

After a notice of termination under Sub-Clause 15.5 [Employer's Entitlement to Termination], Sub-Clause 16.2 [Termination by Contractor] or Sub-Clause 19.1 [Optional Termination, Payment and Release] has taken effect, the Contractor shall promptly:

(a) cease all further work, except for such work as may have been instructed by the Engineer for the protection of life or property or for the safety of the Works,

(b) hand over Contractor's Documents, Plant, Materials and other work, for which the Contractor has received payment, and

(c) remove all other Goods from the Site, except as necessary for safety, and leave the Site.

16.4 Payment on Termination

After a notice of termination under Sub-Clause 16.2 [Termination by Contractor] has taken effect, the Employer shall promptly:

(a) return the Performance Security to the Contractor,

(b) pay the Contractor in accordance with Sub-Clause 19.1 [Optional

Termination, Payment and Release], and

(c) should the contract be terminated under sub-clause 15.5 of this clause and the contractor claims payment for expenditure incurred by him in the expectation of completing the whole of the work, the Employer shall admit and consider such claims as are deemed reasonable and are supported by vouchers to the satisfaction of the Engineer. The Employer's decision on the necessity and propriety of such expenditure shall be final and conclusive.

(d) The Contractor shall have no claim to any payment of compensation or otherwise, howsoever on account of any profit or advantage which he might have derived from the execution of the work in full but which he did not derive in consequence of termination of contract.

17. Risk and Responsibility

17.1 Indemnities

The Contractor shall indemnify and hold harmless the Employer, the Employer's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of:

(a) bodily injury, sickness, disease or death, of any person including railway user whatsoever arising out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and

(b) damage to or loss of any property, real or personal (other than the Works), to the extent that such damage or loss arises out of or in the course of or by reason of the Contractor's design (if any), the execution and completion of the Works and the remedying of any defects, unless and to the extent that any such damage or loss is attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel,, their respective agents, or anyone directly or indirectly employed by any of them.

The Employer shall indemnify and hold harmless the Contractor, the Contractor's Personnel, and their respective agents, against and from all claims, damages, losses and expenses (including legal fees and expenses) in respect of (1) bodily injury, sickness, disease or death, which is attributable to any negligence, wilful act or breach of the Contract by the Employer, the Employer's Personnel, or any of their respective agents, and (2) the matters for which liability may be excluded from insurance cover, as described in sub-paragraphs (d)(i), (ii) and (iii) of Sub-Clause 18.3 [Insurance Against Injury to Persons and Damage to Property].

17.2 Contractor's Care of the Works

The Contractor shall take full responsibility for the care of the Works and Goods from the Commencement Date until the Taking-Over Certificate is issued (or is deemed to be issued under Sub-Clause 10.1 [Taking Over of the Works and Sections]) for the Works, when responsibility for the care of the Works shall pass to the Employer. If a Taking-Over Certificate is issued (or is

so deemed to be issued) for any Section or part of the Works, responsibility for the care of the Section or part shall then pass to the Employer.

After responsibility has accordingly passed to the Employer, the Contractor shall take responsibility for the care of any work which is outstanding on the date stated in a Taking-Over Certificate, until this outstanding work has been completed.

If any loss or damage happens to the Works, Goods or Contractor's Documents during the period when the Contractor is responsible for their care, from any cause not listed in Sub-Clause 17.3 [Employer's Risks], the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Goods and Contractor's Documents conform with the Contract.

The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a Taking-Over Certificate has been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Contractor was liable.

17.3 Employer's Risks

The risks referred to in Sub-Clause 17.4 below, insofar as they directly affect the execution of the works in the Country, are:

(a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,

(b) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war, within the Country,

(c) riot, commotion or disorder within the Country by persons other than the Contractor's Personnel,

(d) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, within the Country, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity,

(e) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,

(f) use or occupation by the Employer of any part of the Permanent Works, except as may be specified in the Contract,

(g) design of any part of the Works by the Employer's Personnel or by others for whom the Employer is responsible, and

(h) any operation of the forces of nature which is Unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventative precautions.

17.4 Consequences of Employer's Risks

If and to the extent that any of the risks listed in Sub-Clause 17.3 above results in loss or damage to the Works, Goods or Contractor's Documents, the Contractor shall promptly give notice to the Engineer and shall rectify this loss or damage to the extent required by the Engineer.

If the Contractor suffers delay and/or incurs Cost from rectifying this loss or damage, the Contractor shall give a further notice to the Engineer and shall be

entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:

(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and

(b) payment of any such Cost, which shall be included in the Contract Price. In the case of sub-paragraphs (f) and (g) of Sub-Clause 17.3 [Employer's Risks], Cost shall be payable.

After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.

17.5 Intellectual and Industrial Property Rights

In this Sub-Clause, "infringement" means an infringement (or alleged infringement) ofany patent, registered design, copyright, trade mark, trade name, trade secret or other intellectual or industrial property right relating to the Works; and "claim" means a claim (or proceedings pursuing a claim) alleging an infringement.

Whenever a Party does not give notice to the other Party of any claim within 28 days of receiving the claim, the first Party shall be deemed to have waived any right to indemnity under this Sub-Clause.

The Employer shall indemnify and hold the Contractor harmless against and from any claim alleging an infringement which is or was:

(a) an unavoidable result of the Contractor's compliance with the Contract, or

(b) a result of any Works being used by the Employer:

(i) for a purpose other than that indicated by, or reasonably to be inferred from, the Contract, or

(ii) in conjunction with any thing not supplied by the Contractor, unless such use was disclosed to the Contractor prior to the Base Date or is stated in the Contract.

The Contractor shall indemnify and hold the Employer harmless against and from any other claim which arises out of or in relation to (i) the manufacture, use, sale or import of any Goods, or (ii) any design for which the Contractor is responsible.

If a Party is entitled to be indemnified under this Sub-Clause, the indemnifying Party may (at its cost) conduct negotiations for the settlement of the claim, and any litigation or arbitration which may arise from it. The other Party shall, at the request and cost of the indemnifying Party, assist in contesting the claim. This other Party (and its Personnel) shall not make any admission which might be prejudicial to the indemnifying Party, unless the indemnifying Party failed to take over the conduct of any negotiations, litigation or arbitration upon being requested to do so by such other Party.

17.6 Limitation of Liability

Neither Party shall be liable to the other Party for loss of use of any Works, loss of profit, loss of any contract or for any indirect or consequential loss or damage which may be suffered by the other Party in connection with the Contract, provided that this exclusion shall not apply to any obligation of the Contractor to pay Delay Damages to the Employer under Sub-Clause 8.7

[Delay Damages].

The total liability of the Contractor to the Employer, under or in connection with the Contract other than under Sub-Clause 4.19 [Electricity, Water and Gas], Sub-Clause 4.20 [Employer's Equipment and Free-Issue Material], Sub-Clause 17.1 [Indemnities] and Sub-Clause 17.5 [Intellectual and Industrial Property Rights], shall not exceed the sum as specified in the Contract Data or if nothing is specified in the Contract Data, the accepted Contract Amount.

This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.

17.7 Use of Employer's Accommodation/ Facilities

The Contractor shall take full responsibility for the care of the Employer provided accommodation and facilities, if any, as detailed in the Specification, from the respective dates of hand-over to the Contractor until cessation of occupation(where hand-over or cessation of occupation may take place after the date stated in the Taking-Over Certificate for the Works).

If any loss or damage happens to any of the above items while the Contractor is responsible for their care arising from any cause whatsoever other than those for which the Employer is liable, the Contractor shall, at his own cost, rectify the loss or damage to the satisfaction of the Engineer.

18. Insurance

18.1 General Requirements for Insurances

In this Clause, "insuring Party" means, for each type of insurance, the Party responsible for effecting and maintaining the insurance specified in the relevant Sub-Clause.

Wherever the Contractor is the insuring Party, each insurance shall be effected with insurers and in terms approved by the Employer. These terms shall be consistent with any terms agreed by both Parties before the date of the Letter of Acceptance. This agreement of terms shall take precedence over the provisions of this Clause.

Wherever the Employer is the insuring Party, each insurance shall be effected with insurers and in terms consistent with the details annexed to the Special Conditions of Contract.

If a policy is required to indemnify joint insured, the cover shall apply separately to each insured as though a separate policy had been issued for each of the joint insured. If a policy indemnifies additional joint insured, namely in addition to the insured specified in this Clause, (i) the Contractor shall act under the policy on behalf of these additional joint insured except that the Employer shall act for Employer's Personnel, (ii) additional joint insured shall not be entitled to receive payments directly from the insurer or to have any other direct dealings with the insurer, and (iii) the insuring Party shall require all additional joint insured to comply with the conditions stipulated in the policy.

Each policy insuring against loss or damage shall provide for payments to be made in the currencies required to rectify the loss or damage.

Payments received from insurers shall be used for the rectification of the loss or damage.

The relevant insuring Party shall, within the respective periods stated in the Contract Data (calculated from the Commencement Date), submit to the other Party:

(a) evidence that the insurances described in this Clause have been effected, and

(b) copies of the policies for the insurances described in Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment] and Sub-Clause 18.3 [Insurance against Injury to Persons and Damage to Property].

(c) If the contractor fails to submit evidence and copies of the policies as mentioned in (a) & (b) above to prove that the policies have been obtained within the period specified in the contract data, and submits the same later on and from the submitted evidence it is found that the policies have not been obtained within the period specified, the Employer shall recover double the cost of the premium for the period the policies have been delayed.

When each premium is paid, the insuring Party shall submit evidence of payment to the other Party. Whenever evidence or policies are submitted, the insuring Party shall also give notice to the Engineer.

Each Party shall comply with the conditions stipulated in each of the insurance policies. The insuring Party shall keep the insurers informed of any relevant changes to the execution of the Works and ensure that insurance is maintained in accordance with this Clause.

Neither Party shall make any material alteration to the terms of any insurance without the prior approval of the other Party. If an insurer makes (or attempts to make) any alteration, the Party first notified by the insurer shall promptly give notice to the other Party.

If the insuring Party fails to effect and keep in force any of the insurances it is required to effect and maintain under the Contract, or fails to provide satisfactory evidence and copies of policies in accordance with this Sub-Clause, the other Party may (at its option and without prejudice to any other right or remedy) effect insurance for the relevant coverage and pay the premiums due. The insuring Party shall pay double the amount of these premiums to the other Party, and the Contract Price shall be adjusted accordingly.

Nothing in this Clause limits the obligations, liabilities or responsibilities of the Contractor or the Employer, under the other terms of the Contract or otherwise. Any amounts not insured or not recovered from the insurers shall be borne by the Contractor and/or the Employer in

accordance with these obligations, liabilities or responsibilities. However, if the insuring Party fails to effect and keep in force an insurance which is available and which it is required to effect and maintain under the Contract, and the other Party neither approves the omission nor effects insurance for the coverage relevant to this default, any moneys which should have been recoverable under this insurance shall be paid by the insuring Party.

Payments by one Party to the other Party shall be subject to Sub-Clause 2.5 [Employer's Claims] or Sub-Clause 20.1 [Contractor's Claims], as applicable.

The Contractor shall be entitled to place all insurance relating to the Contract (including, but not limited to the insurance referred to Clause 18) with insurers from any eligible source country.

18.2 Insurance for Works and Contractor's Equipment

The Contractor shall insure the Works, Plant, Materials, including those issued by the Employer and Contractor's Documents for not less than the full reinstatement cost including the costs of demolition, removal of debris and professional fees and profit, subject to a maximum value indicated in Contract Data**.**. This insurance shall be effective from the date by which the evidence is to be submitted under sub-paragraph (a) of Sub-Clause 18.1 [General Requirements for Insurances], until the date of issue of the Taking-Over Certificate for the Works.

The insuring Party shall maintain this insurance to provide cover until the date of issue of the Performance Certificate, for loss or damage for which the Contractor is liable arising from a cause occurring prior to the issue of the Taking-Over Certificate, and for loss or damage caused by the Contractor in the course of any other operations (including those under Clause 11 [Defects Liability]).

The insuring Party shall insure the Contractor's Equipment for not less than the full replacement value, including delivery to Site. For each item of Contractor's Equipment, the insurance shall be effective while it is being transported to the Site and until it is no longer required as Contractor's Equipment.

Unless otherwise stated in the Special Conditions of Contract, insurances under this Sub-Clause:

(a) shall be effected and maintained by the Contractor as insuring Party,

(b) shall be in the joint names of the Parties, who shall be jointly entitled to receive payments from the insurers, payments being held or allocated between the Parties for the sole purpose of rectifying the loss or damage,

(c) shall cover all loss and damage from any cause not listed in Sub-Clause 17.3 [Employer's Risks],

(d) shall also cover loss or damage to a part of the Works which is attributable to the use or occupation by the Employer of another part of the Works, and loss or damage from the risks listed in sub-paragraphs (c), (g) and (h) of Sub-Clause 17.3 [Employer's Risks], excluding (in each case) risks which are not insurable at commercially reasonable terms, with deductibles per occurrence of not more than the amount stated in the Contract Data (if an amount is not so stated, this sub-paragraph (d) shall not apply), and

(e) may however exclude loss of, damage to, and reinstatement of:

i) part of the Works which is in a defective condition due to a defect in its design, materials or workmanship (but cover shall include any other parts which are lost or damaged as a direct result of this defective condition and not as described in sub-paragraph (ii) below),

ii) a part of the Works which is lost or damaged in order to reinstate any other part of the Works if this other part is in a defective condition due to a defect in its design, materials or workmanship,

iii) a part of the Works which has been taken over by the Employer, except to the extent that the Contractor is liable for the loss or damage, and

iv) Goods while they are not in the Country, subject to Sub-Clause 14.5 [Plant and Materials intended for the Works].

If, more than one year after the Base Date, the cover described in sub-paragraph (d) above ceases to be available at commercially reasonable terms, the Contractor shall (as insuring Party) give notice to the Employer, with supporting particulars. The Employer shall then (i) be entitled subject to Sub-Clause 2.5 [Employer's Claims] to payment of an amount equivalent to such commercially reasonable terms as the Contractor should have expected to have paid for such cover, and (ii) be deemed, unless he obtains the cover at commercially reasonable terms, to have approved the omission under Sub-Clause 18.1 [General Requirements for Insurances].

18.3 Insurance against Injury to Persons and Damage to Property

The insuring Party shall insure against each Party's liability for any loss, damage, death or bodily injury which may occur to any physical property (except things insured under Sub-Clause 18.2 [Insurance for Works and Contractor's Equipment]) or to any person (except persons insured under Sub-Clause 18.4 [Insurance for Contractor's Personnel]), which may arise out of the Contractor's performance of the Contract and occurring before the issue of the Performance Certificate.

This insurance shall be for a limit per occurrence of not less than the amount stated in the Contract Data, with no limit on the number of occurrences. If an amount is not stated in the Contract Data, this Sub-Clause shall not apply.

Unless otherwise stated in the Special Conditions of Contract, the insurances specified in this Sub-Clause:

(a) shall be effected and maintained by the Contractor as insuring Party,

(b) shall be in the joint names of the Parties,

(c) shall be extended to cover liability for all loss and damage to the Employer's property including Railways Property (except things insured under Sub-Clause 18.2) arising out of the Contractor's performance of the Contract, and

(d) may however exclude liability to the extent that it arises from:

(i) the Employer's right to have the Permanent Works executed on, over, under, in or through any land, and to occupy this land for the Permanent Works,

(ii) damage which is an unavoidable result of the Contractor's obligations to execute the Works and remedy any defects, and

(iii) a cause listed in Sub-Clause 17.3 [Employer's Risks], except to the extent that cover is available at commercially reasonable terms.

18.4 Insurance for Contractor's Personnel

The Contractor shall abide by the provisions of ESIC Act, 1948 (extended from time to time) to take care of insurance against liability for claims, damages, losses and expenses (including legal fees and expenses) arising from injury, sickness or disease. In addition the contractor shall also maintain insurance against liability for claim of death of any person employed by the Contractor or any other of the Contractor's Personnel.

The Employer and the Engineer shall also be indemnified under the policy of insurance, except that this insurance may exclude losses and claims to the extent that they arise from any act or neglect of the Employer or of the Employer's Personnel.

The insurance shall be maintained in full force and effect during the whole time that these personnel are assisting in the execution of the Works. For a Subcontractor's employees, the insurance may be effected by the Subcontractor, but the Contractor shall be responsible for compliance with this Clause.

19. Force Majeure

If at any time, during the 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, acts of public enemy, civil commotion, sabotage, serious loss or damage by fire, explosions, epidemics, strikes, lockouts or acts of God (hereinafter referred to 'events') provided, notice of the happening of any such event is given by either party to the other within 14 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 of 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 decision of the 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 continuous period exceeding 84 days, either party may at its option terminate the contract by giving notice to the other party.

19.1 Payment and Release in case of Optional Termination

Upon such termination, the Engineer shall determine the value of the work done and issue a Payment Certificate which shall include :

(a) The amounts payable for any work carried out for which a price is stated in the contract;

(b) The Cost of Plant and Materials ordered for the Works which have been delivered to the Contractor, or of which the contractor is liable to accept delivery; this Plant and materials shall become the property of (and be at the risk of) the Employer when paid for by the Employer, the Contractor shall place the same at the Employer's disposal;

(c) Other Costs or liabilities supported by necessary documentary evidence which in the circumstances were reasonably and necessarily incurred by the Contractor in the expectation of completing the Works as per mutually agreed programme.

(d) the Cost of removal of Temporary Works and Contractor's Equipment from the Site and the return of these items to the Contractor's works in his country (or to any other destination at no greater cost).

20. Claims, Disputes and Arbitration

20.1 Contractor's Claims

If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Engineer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of

the event or circumstance.

If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.

The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Engineer. Without admitting the Employer's liability, the Engineer may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Engineer to inspect all these records, and shall (if instructed) submit copies to the Engineer.

Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Engineer, the Contractor shall send to the Engineer a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:

(a) this fully detailed claim shall be considered as interim;

(b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Engineer may reasonably require; and

(c) the Contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Engineer.

Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Engineer and approved by the Contractor, the Engineer shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within such time.

Each Payment Certificate shall include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.

The Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause 8.4 [Extension of Time for Completion], and/or (ii) the additional payment (if any) to

which the Contractor is entitled under the Contract.

The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause.

20.2 Amicable Settlement

In case any dispute between the Engineer and the Contractor for which claim has already been made by the contractor, remains unresolved, the Contractor shall, then, give notice of dissatisfaction and intention to commence arbitration to the Employer duly specifying the subject of the dispute or difference as also the amount of claim item wise. The Parties shall make attempts to settle the dispute amicably before the commencement of arbitration as per procedure laid down in policy letter no. RVNLCO/CIV/PJCL(ARBT)/1/2021/Tender Cell/CO dated 13.07.2021 or any modification issued at a later date (circular enclosed in Section 7 Part B (PCC)). However, unless both Parties agree otherwise, demand for arbitration may be made by the contractor after ninety days from the day on which a notice of dissatisfaction and intention to commence arbitration was given, even if no attempt at amicable settlement has been made.

20.3 Arbitration

Any dispute, in respect of which amicable settlement has not been reached, arising between the Employer and the Domestic or Foreign Contractor related to any matter arising out of or connected with this contract, then the contractor shall be entitled to demand in writing that the dispute or difference be referred to arbitration.

Only such dispute(s) or difference(s) in respect of which the demand had been made for amicable settlement under GCC 20.2 but could not be settled, shall be referred to arbitration subject to the condition that cumulative amount of claims in the contract is not exceeding 20% of the contract price. In case the cumulative amount of claims exceeds 20% of the contract price, arbitration clause will not be applicable.

The Arbitration proceedings shall commence from the day, a written and duly quantified demand for arbitration is received by Chairman and Managing Director, Rail Vikas Nigam Limited, New Delhi (CMD/RVNL).

The disputes so referred to arbitration shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996 and any statutory modification or re-enactment thereof.

Further, it is agreed between the parties as under:

20.3.1 **Number of Arbitrators:** The arbitral tribunal shall consist of three arbitrators.

20.3.2 **Procedure for Appointment of Arbitrators:** The arbitrators shall be appointed as per following procedure:

(a) The Contractor, while invoking demand for arbitration, shall submit to CMD/RVNL, claims duly quantified along with name and contact details of his nominee arbitrator. Thereafter, he Employer will nominate his nominee arbitrator within a period of 30 days from receipt of such demand from the Contractor and will issue letter of appointment to both the arbitrators appointed by the parties with a copy to the Contractor.

(b) The third Arbitrator shall be chosen by the two Arbitrators so appointed by the parties and shall act as Presiding Arbitrator. In case of failure of the two Arbitrators appointed by the parties to reach upon consensus within a period of 30 days from the appointment of the Arbitrators subsequently appointed, then, upon the request of either or both parties, the Presiding Arbitrator shall be appointed by the Chairman and Managing Director, Rail Vikas Nigam Limited, New Delhi.

(c) If one or more of the arbitrators appointed as above refuses to act as arbitrator, withdraws from his office as arbitrator, or vacates his/their office/offices or is/are unable or unwilling to perform his functions as arbitrator for any reason whatsoever or dies or in the opinion of the CMD/RVNL fails to act without undue delay, the CMD/RVNL shall appoint new arbitrator/arbitrators to act in his/their place except in case of new Presiding Arbitrator who shall be chosen following the same procedure as mentioned in para (b) above. Such re-constituted Tribunal may, at its discretion, proceed with the reference from the stage at which it was left by the previous arbitrator(s).

20.3.3 **Qualification and Experience of Arbitrators (to be appointed as per sub-clause 20.3.2 above):** The contract being of specialized nature requiring knowledge and experience of dealing with construction contracts, the arbitrators to be appointed shall have minimum qualification and experience as under:

Arbitrator shall be;

a working/retired officer (not below E-9 grade and above in a PSU with which RVNL has no business relationship) of any discipline of Engineering or Accounts/Finance department, having experience in Contract Management of construction contracts; or

a retired officer (retired not below the HAG level) of any Engineering/Accounts Services of Central Government, having experience in Contract Management of construction contracts; ora retired officer who should have retired more than 3 years previously from the date of appointment as Arbitrator (retired not below E-9 grade in RVNL or a PSU with which RVNL has a business relationship) of

any Engineering discipline or Accounts department, having experience in Contract Management of construction contracts.

No person other than the persons appointed as per above procedure and having above qualification and experience shall act as Arbitrator. In case any person having the qualification and experience other than that mentioned above is nominated as arbitrator, the arbitration clause shall cease to exist and shall not be applicable.

20.3.4 No new claim, except as otherwise mutually agreed by the Parties, shall be added during proceedings by either party. However, a party may amend or supplement the original claim or defence thereof during the course of arbitration proceedings subject to acceptance by Tribunal having due regard to the delay in making it.

20.3.5 Neither party shall be limited in the proceedings before such arbitrators to the evidence nor did arguments previously put before during amicable settlement.

20.3.6 The reference to arbitration may proceed, notwithstanding that the Works shall not then be or be alleged to be complete, provided always that the obligations of the Employer, the Engineer and the Contractor shall not be altered by the reason of the arbitration being conducted during the progress of the Works. Neither party shall be entitled to suspend the Works, nor shall payment to the Contractor be withheld on account of such proceedings

20.3.7 If the contractor(s) does/do not prefer his/their specific and final claims in writing, within a period of 90 days of receiving the intimation from the Employer/Engineer that the final bill is ready for signature of the contractor(s), he/they will be deemed to have waived his/their claim(s) and the Employer shall be discharged and released of all liabilities under the contract in respect of these claims.

20.3.8 Arbitration proceedings shall be held at New Delhi, India or at a place where CPM/RVNL's (dealing the contract) office is located, and the language of the arbitration proceedings and that of all documents and communications between the parties shall be in English.

20.3.9 The Arbitral Tribunal should record day to day proceedings. The proceedings shall normally be conducted on the basis of documents and written statements.

All arbitration awards shall be in writing and shall state item wise, the sum and detailed reasons upon which it is based.

20.3.10 Any ruling on award shall be made by a majority of members of Tribunal. In the absence of such a majority, the views of the Presiding Arbitrator shall prevail.

A party may apply for correction of any computational errors, any typographical or clerical errors or any other error of similar nature occurring in the award of a tribunal and interpretation of specific point of award to tribunal

within 60 days of the receipt of award.

A party may apply to tribunal within 60 days of receipt of award to make an additional award as to claims presented in the arbitral proceedings but omitted from the arbitral award.

20.3.11 Where the Arbitral award is for the payment of money, no interest shall be payable on whole or any part of the money for any period till the date on which the award is made.

20.3.12 The fees and other charges of the conciliator/arbitrators shall be as per the fee structure fixed by the employer (enclosed as Annexure 3 to section 7) and as amended from time to time irrespective of the fact whether the Arbitrator(s) is/are appointed by the parties or by the Court of law unless specifically directed by Hon'ble Court otherwise on the matter, and shall be shared equally by the Employer and the Contractor. However, the expenses incurred by each party in connection with the preparation, presentation will be borne by itself.

21. Jurisdiction of Courts The Contract Agreement shall be subject to exclusive jurisdiction of Courts as indicated in the Contract Data.

APPENDIX 1

SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK

(The laws as current on the date of bid opening will apply)

a) **Workmen Compensation Act 1923**: The Act provides for compensation in case of injury by accident arising out of and during the course of employment.

b) **Payment of Gratuity Act 1972**: Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed 5 years service or more or on death the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.

c) **Employees P.F. and Miscellaneous Provision Act 1952 (since amended):** The Act Providesfor monthly contributions by the employer plus workers @ 10% or 8.33%. The benefits payable under the Act are :

(i) Pension or family pension on retirement or death, as the case may be.

(ii) Deposit linked insurance on the death in harness of the worker.

(iii) payment of P.F. accumulation on retirement/death etc.

d) **Maternity Benefit Act 1951**: The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.

e) **Contract Labour (Regulation & Abolition) Act 1970**: The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the Contractor fails to provide, the same are required to be provided, by the Principal Employer by Law. The Principal Employer is required to take Certificate of Registration and the Contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ 20 or more contract labour.

f) **Minimum Wages Act 1948**: The Employer is supposed to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of Buildings, Roads, Runways are scheduled employments.

g) **Payment of Wages Act 1936:** It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.

h) **Equal Remuneration Act 1979**: The Act provides for payment of equal wages for work of equal nature to Male and Female workers and for not making discrimination against Female employees in the matters of transfers, training and promotions etc.

i) **Payment of Bonus Act 1965**: The Act is applicable to all establishments employing 20 or more employees. The Act provides for payments of annual bonus subject to a minimum of 8.33% of wages and maximum of 20% of wages to employees drawing Rs.3500/-per month or less. The bonus to be paid to employees getting Rs.2500/- per month or above upto Rs.3500/- per month shall be worked out by taking wages as Rs.2500/-per month

only. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. Some of the State Governments have reduced the employment size from 20 to 10 for the purpose of applicability of this Act.

j) **Industrial Disputes Act 1947**: The Act lays down the machinery and procedure for resolution of Industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.

k) **Industrial Employment (Standing Orders) Act 1946**: It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same certified by the designated Authority.

l) **Trade Unions Act 1926:** The Act lays down the procedure for registration of trade unions of workmen and employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.

m) **Child Labour (Prohibition & Regulation) Act 1986**:The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building and Construction Industry.

n) **Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979:** The Act is applicable to an establishment which employs 5 or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as housing, medical aid, travelling expenses from home upto the establishment and back, etc.

o) **The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996:** All the establishments who carry on any building or other construction work and employs 10 or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the Building or construction work and other welfare measures, such as Canteens, First-Aid facilities, Ambulance, Housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.

As per Central Government's Notification No.S.O.2899 dated 26.09.1996 under this act, the cess shall be levied @1% of cost of construction works which shall be deducted from each bill of the payment due to the contractor.

p) **Factories Act 1948**: The Act lays down the procedure for approval at plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to

designated authorities. It is applicable to premises employing 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

q) **The Employees State Insurance Act, 1948 (Act No. 34 of 1948) (Provisions as extended from time to time):**An Act to provide for certain benefits to employees in case of sickness, maternity and 'employment injury' and to make provision for certain other matters in relation thereto.

Section 7

Special/Particular Conditions of Contract

Part A: Contract Data

Section 7 - Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC

Part A - Contract Data

Conditions	Reference to GCC	Data	
Contract Type	-	System Contract	
Employer's name and address	1.1.2.2 & 1.3	Rail Vikas Nigam Limited (A Government of India Enterprise) "World Trade Center, Tower A, 6th to 9th Floor, Nauroji Nagar, New Delhi-110029" Tele: 91-11-26182963/69/70/72 Fax: 91-11-26182957	
Employer's Representative	1.1.2.6	Sr. Advisor S&T Rail Vikas Nigam Ltd. 174/2, Shakti Nagar Habibganj, Bhopal 462024 Email rvnlbplsnt@gmail.com	
Engineer's name and address	1.1.2.4 & 1.3 (b)	*HSRC Bhopal*	
Defects Notification Period	1.1.3.7	180 days.	
Sections (for all contracts except Bridge contract)	1.1.5.6; 1.1.3.3 & 8.2	**Project Sections Name/Description** (Sub-Clause 1.1.5.6**)**	**Time for Completion** (Sub-Clause1.1.3.3 & 8.2**)**
		Design, Supply, Installation, testing & commissioning of Indoor Signal and Telecommunication work from Mangliyagaon (Incl.) to Budni (Incl.) Section with provision of Electronic Interlocking in 14 stations viz Pannod, Semaliyachau, Chapda, Kheri, Hathnora, Deoli, Kannod, Khategaon, Pipaliya Nankar, Bapcha, Nasrullahganj, Salkanpur,	36 Months + 6 months (DLP)

Conditions	Reference to GCC	Data
		Balkhera, Budni and alteration in existing interlocking system at Mangliyagaon station in connection with New Single Broad Guage Rail Line Between Indore to Budni in the state of Madhya Pradesh, India
Electronic transmission systems	1.3 (a)	Not permitted
Address for Communication to Employer	1.3 (b)	Sr. Advisor S&T Rail Vikas Nigam Ltd. 174/2, Shakti Nagar Habibganj, Bhopal 462024 Email rvnlbplsnt@gmail.com
Governing Law	1.4	The Laws of Republic of India
Ruling language	1.4	English
Language for communications	1.4	English
Time for access to Site (after the date of commencement)	2.1	Starting from the Date of Commencement, the section will be progressively handed over in 90 days.
Performance Security	4.2 & 11.9	The Performance Security shall be for an amount of 5% (five percent) of the Accepted Contract Amount excluding GST and in the same currency(ies) of the Accepted Contract amount in the prescribed form for the stated amount valid for a period of 28 days beyond issue of performance certificate.
Performance Security	4.2	Rate of addition or reduction of Performance Security due to variation in contract price: 5% (Five percent)
Proportionate Performance Security for a particular section (for all contracts except Bridge Contract)	4.2	= full performance security for the contract multiplied by Route Kms of the Particular Section divided by total Route Kms for the entire Contract.
Normal working hours	6.5	Sunrise to Sunset (This may be modified to suit the work requirements).
Commencement of works	8.1	Within forty-two (42) days from the date Contractor receives Letter of acceptance.

Conditions	Reference to GCC	Data
Delay damages for the Works when delay is fully attributable to the contractor	8.7(a)	(i) 1/25000 of the Contract Price per day in the currencies and proportions in which the Contract Price is payable in case of delay in completion for entire works; (ii) 1/25000 of the proportionate Contract Price per day in the currencies and proportions in which the Contract Price is payable in case delay in completion of a particular section (Proportionate Contract Price shall be arrived based on Route Kms of the Particular Section divided by total Route Kms for the entire Contract multiplied by Contract Price).
Delay damages for the Works when delay is partly attributable to the contractor	8.7(b)	1/500000 to 1/50000 of contract price per day of delay in the currencies and proportions in which the Contract Price is payable.
Maximum amount of delay damages	8.7	5% (five percent) of the Contract Price.
Amount of bonus for early completion (for Composite contract/Systems Contract/RE Contract)	8.13	1% of the proportionate Contract Price per month (part of the month to be excluded) for substantial completion of particular section (Proportionate Contract Price shall be arrived at based on the Route Kms of the Particular Section multiplied by Contract Price divided by total Route Kms for the entire Contract).
Maximum limit of bonus (for Composite contract/Systems Contract/RE Contract)	8.13	5% of proportionate Contract Price of the particular section.
City Applicable	13.8(iii)	*Bhopal*
State Capital Applicable	13.8(v)	*Madhya Pradesh*
Mobilization advance payment	14.2.1	Comprises of the percentage of Accepted Contract Amount payable in the currencies and proportions in which the Accepted Contract Amount is payable and in installments as mentioned below; **Mobilisation Advance** | **Installments** As per request of the Contractor subject to a maximum of 5% | Two Equal

Conditions	Reference to GCC	Data
Timing of Mobilization Advance Payment	14.2.1	First Installment within 21 (Twenty one) days from the date of receipt of guarantee acceptable to Employer. Second Installment shall be released only when the contractor submits statement of having utilized the First Installment of mobilization Advance and the Employer is satisfied that the utilization has been done in purposeful manner. This shall be released within 21 days from the date of receipt of guarantee acceptable to the Employer.
Advance Payment against Plant and Machinery	14.2.2	N/A
Interest on Advance Payment	14.2.1 & 14.2.2	At the rate of 9.90 % (Nine point nine zero percent) simple interest per annum on reducing balances.
Repayment rate of Advance payment	14.2.4	13.5% (Thirteen and half percent) of the amount of each payment if the advance taken is 10% of the contract price. 20% (Twenty percent) of the amount of each payment if the advance taken is 15% of the contract price. If the total advance taken is less, the rate of recovery shall be proportionate. In case further advance is taken under sub-clause 14.2.1 and/or 14.2.2, after repayment has already been started, the Repayment Rate (R%) shall be revised in the next payment certificate as per following formula; **R = Ax100/(80 - % financial progress till previous payment certificate)** Where **'A'** is total outstanding Advance as a percentage of Contract Price. If the Contractor returns part of the advance amount on his own or on the instructions of the Employer or in the event that the Contractor has failed to deposit the advance amount as per demand of the Employer and the Employer has subsequently encashed the Bank Guarantee(s), then the rate of recovery shall be suitably reworked considering the balance amount of advance due to be recovered and to ensure that the complete recovery of advance and accrued interest is made within 80% of the financial progress.
Percentage of Retention Money	14.3(c)	Retention money shall be deducted @ 6%
Limit of Retention Money	14.3 (c)	5% of the Contract Price
Plant and Materials	14.5(b) (i)	Not applicable
	14.5(c) (i)	Plant and material Advance when delivered at site are : N/A

Conditions	Reference to GCC	Data
Employers' Bank details for LC **(a) Nodal Branch** **(b) Issuance/ reimbursing branch for LC**	14.7.1	**(a) <u>ICICI Bank, 9A, Phelps Building, Connaught Place, New Delhi-110001.</u>** **<u>Account No. 000705046055</u>** **<u>IFSC Code - ICIC0000007</u>** **(b) <u>ICICI Bank, Shakti Nagar Bhopal Branch Plot No. 1, Sector 1, Shakti Nagar, Bhopal 462024.</u>** **<u>Account No. 347105000238</u>** **<u>IFSC Code - ICIC0003471</u>**
Interest Rate	14.8	At the rate of 13.00 % (Thirteen percent) simple interest per annum on reducing balances.
Maximum Total Liability of the Contractor	17.6	Accepted Contract Amount
Periods for submission of insurance: **a) evidence of insurance** **b) relevant policies**	18.1	a) 14 days b) 28 days
Maximum amount of deductibles for insurance of Employer's risks.	18.2 (d)	NIL
Minimum amount of insurance by the Contractor for Works and Contractor's Plant and Materials including loss or damage to equipment.	18.2	100 (hundred) percent of Contract price
Minimum amount of insurance by the Contractor for Third party insurance including damage to Other Property and personal injury or death insurance for: a) for other people, and b) for Contractor's Employees.	18.3	Rs.2 (two) crores per occurrence without any limit for number of occurrences.
Jurisdiction of Courts	21	*Bhopal*

Section 7

Special/Particular Conditions of Contract

Part B: Specific Provisions

SECTION – 7

PART B

PARTICULAR CONDITIONS OF CONTRACT

Whenever there is a conflict or inconsistency between the provisions of the Particular Conditions of Contract–Section 7 PART B and the General Conditions of Contract–Section 6, the provisions stipulated in Particular Conditions of Contract–Section 7 PART B shall prevail and supersede those appearing in the General Conditions of Contract–Section 6.

Section 7 – PART B - Particular Conditions of Contract

The following Particular Conditions of Contract (PCC) Section 7-Part B shall supplement the General Conditions of Contract (GCC) Section 6. Whenever there is a conflict, the provisions herein shall prevail over those in the GCC Section 6.

Table of Clauses

Reference to Sub Clause	Subject	Page No.	Remarks
4.8	Annexure 1 – Safety Provisions	4	Amended
8.13	Bonus for early completion	8	Replaced
13.8	Annexure 2 – Adjustments for changes in cost, Percentages governing Price Adjustment	9	
20.3.12	Annexure 3 – Fee Structure for Arbitrators/ Reconciliators	10	
20.2	Annexure 4 – Procedure for Amicable Settlement in Contracts	13	
22	Annexure 5 - Risk allocation and Mitigation	15	
	Annexure 6 - Discharge of obligations as Principal Employer towards Royalty	22	

Annexure 1 to Section 7

Safety Provisions

(1) The Contractor shall comply with all the precautions as required for the safety of the workmen by the I.L.O Convention No.62 as far as they are applicable to the Contract. The Contractor shall provide all necessary safety appliances; such as safety goggles, helmets, masks, etc to the workmen and the staff.

(2) Suitable scaffolds shall be provided for workmen for all work that cannot safely be done from the ground, or from solid construction except for such short period work as can be done safely from ladders. When a ladder is used, an extra labourer shall be engaged for holding the ladder and if the ladder is used for carrying materials as well, suitable foot-holds and hand-holds shall be provided on the ladder, which shall be given an inclination not steeper than 1/4 to 1 (1/4 horizontal in 1 vertical)

(3) Scaffolding or staging more than 3.25 metres above the ground or floor, swung or suspended from an overhead support or erected with stationary support, shall have a guard rail properly attached, bolted, braced and otherwise secured at least 1 metre high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such openings as maybe necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying in from the support or structure.

(4) Working platforms, gangways and stairways shall be so constructed that they do not sag unduly or unequally, and if the height of any platform or gangway or stairway is more than 3.25 metres above ground level or floor level, it shall have closely spaced boards, have adequate width and be suitably provided with guard rails as described in (3) above.

(5) Every opening in the floor of a structure or in a working platform shall be provided with suitable means to prevent fall of persons or materials by providing suitable fencing or railing with a minimum height of one metre.

(6) Safe means of access and egress shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9 metres in length. The width between side rails in a rung ladder shall in no case be less than 30 cm for ladders up to and including 3 metres in length. For longer ladders the width shall be increased at least 6 mm for each additional 30 cm of length. Spacing of steps shall be uniform and shall not exceed 30 cm.

(7) Adequate precautions shall be taken to prevent danger from electrical equipment. Adequate safety measures shall be taken when any work is undertaken near any live highly charged electric wire. Necessary shutdown may be arranged, where and whenever essential. All rules in force in this connection shall be fully complied

with. The Contractor shall ensure all precautions to prevent any accidents due to electrocution or otherwise.

(8) No materials on any of the sites shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The Contractor shall provide all necessary fencing and lights to protect the public from accidents and shall be bound to bear the expenses of defending every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and costs which may be awarded in any such suit, action or proceedings to any such person or which may with the consent of the Contractor be paid to compromise any claim by any such person.

(9) Excavation and Trenching : All trenches, 1.5 metres or more in depth, shall at all times be supplied with at least one ladder for each 20 metres in length or fraction thereof, Ladders shall be extended from the bottom of the trench to at least 1 metre above the surface of the ground. The sides of a trench, which is 1.5 metres or more in depth shall be stepped back to provide a suitable slope, or be securely held by timber bracing so as to avoid the danger of side collapse. Excavated material shall not be placed within 1.5 metres of the edge of any trench or half the depth of the trench, whichever is more. Excavation shall be made from the top to the bottom. Under no circumstances shall undermining or undercutting be done.

(10) Demolition : Before any demolition work is commenced and also during the process of the work :

(e) All roads and open areas adjacent to the work site shall either be closed or suitably protected.

(f) No electric cable or apparatus, which is liable to be a source of danger other than a cable or apparatus used by operators, shall remain electrically charged:

(g) All practical steps shall be taken to prevent danger to persons employed by the Employer, from risk of fire or explosion, or flooding. No floor, roof or other part of a building shall be so overloaded with debris or materials as to render it unsafe.

(11) All necessary personal safety equipment as considered adequate by the Engineer shall be available for use of persons employed on the site and maintained in a condition suitable for immediate use; and the Contractor shall take adequate steps to ensure proper use of such equipment by those concerned.

(a) Workers employed on mixing asphaltic materials, cement, lime mortars, concrete etc. shall be provided with protective footwear and protective goggles.

(b) Those engaged in handling any material, which is injurious to the eyes, shall be provided with protective goggles.

(c) Those engaged in welding works shall be provided with welder's protective eye-shield.

(d) Stone breakers shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.

(e) When workers are employed in sewers and manhole, which are in use, the contractor shall ensure that manhole covers are open and manholes are ventilated at least for an hour before workers are allowed to go into them. Manholes so open shall be cordoned off with suitable railing and provide warning signals or boards to prevent accidents to the public.

(12) The Contractor shall not employ men below the age of 18 years and women, on the work of painting with products containing lead in any form. Whenever men above the age of 18 years are employed on the work of lead painting, the following precautions shall be taken:

(a) No paint containing lead or lead products shall be used except in the form of paste or ready made paint.

(b) Suitable face masks shall be supplied for use by workers when paint is applied in the form of spray or a surface having lead paint dry rubbed and scrapped.

(c) Overalls shall be supplied by the Contractor to workmen and adequate facilities shall be provided to enable workers to wash during and at the close of any day's work.

13) When work is performed near any place where there is risk of drowning all necessary equipment shall be provided and kept ready for use and all necessary steps taken for prompt first aid treatment of all injuries likely to be sustained during the course of the work.

(14) Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following:

(a) (i) These shall be of good mechanical construction, sound material and adequate strength and free from patent defects and shall be kept in good working order, be regularly inspected and properly maintained.

(ii) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from defects

(b) Every crane driver or hoisting appliance operator shall be properly qualified and no person under the age of 21 shall be in charge of any hoisting machine including scaffold equipment. Only trained men over

the age of 21 shall be permitted to give signals to such plant and appliance operators.

(c) For every hoisting machine and every chain hook, shackle, swivel and pulley block used in hoisting, lowering or as means of suspension, safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with safe working load. In case of a hoisting machine or a variable safe working load, each safe working load and conditions under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to in the paragraph above shall be loaded beyond safe working load except for the purpose of testing.

(d) In case of the Employer's machine, safe working load shall be notified by the Engineer or his Representative. As regards Contractor's machines, the Contractor shall notify safe working load of each machine to the Engineer or his Representative, whenever he brings it to the site of work and get it verified by him.

(15) Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances shall be provided with efficient safeguards; hoisting appliances shall be provided with such means as will reduce the risk of accident during descent of load to the minimum. Adequate precautions shall be taken to reduce to the minimum risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations, which are already energised, insulating mats, working apparel such as gloves, sleeves and boots, as may be necessary, shall be provided. Workers shall not wear any rings, watches and carry keys or other materials which are good conductor of electricity.

(16) All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in a safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities shall be provided at or near places of work.

(17) These safety provisions shall be brought to the notice of all concerned by displaying on a notice board at a prominent place at the work location. Persons responsible for ensuring compliance with the Safety Code shall be named therein by the Contractor.

(18) To ensure effective enforcement of the rules and regulations relating to safety precautions, arrangements made by the contractor shall be open to inspection by the Engineer or his Representative.

(19) Notwithstanding anything contained in conditions (1) to (17) above, the Contractor shall at its own costs, remain liable to comply with the provisions of all acts, rules, regulations, and bylaws for the time being in force in India and applicable in this matter.

(20) For work carried out in the vicinity of any wharf or quay, the Contractor shall abide by all the provisions of the Dock Workers (Safety, Health and Welfare) Scheme, 1961.

(21) The Contractor shall at his own expense provide protective safety Equipment like gloves and footwear for all labour engaged on concrete mixing work and all other types of working involving the use of tar, cement, etc. to the satisfaction of the Engineer or his Representative, and on his failure to do so, the employer shall be entitled to provide the same and recover the cost from the Contractor.

(22) The Contractor shall be responsible for observance, by the sub-contractors, of the foregoing provisions.

A. PCC for Composite & Systems Contract

The contents of clause 8.13 of GCC stand replaced as under:-

8.13 Bonus for early completion: If the Contractor achieves completion of the whole of the Works or any section(s) prior to the intended Completion Date prescribed in Contract data (Extension of time pursuant to Clause 8.4 or any other clause of these conditions will not be considered), the Employer shall pay to the Contractor a sum stated in the Contract data as bonus for early completion, for every calendar month which shall elapse between the date of completion of all items of works as stipulated in the contract, including variations ordered by the Engineer and the time prescribed in Clause 8.2. However, if the General Manager of the Zonal Railway has signed application for opening of the section(s), such section(s) shall be treated as substantially completed on the date 45 days after the date of signing the application for the purposes of bonus under this clause subject to the conditions that:-

a) In case the CRS has authorized the opening of the section(s) within 45 days from the date of signing the application, then date of authorization shall be the date of completion.

b) In case the CRS has not authorized opening of the section(s) after having come for inspection within 45 days from the date of signing the application, then the section(s) shall not be treated as substantially completed for the purposes of bonus under this clause.

For the purpose of calculating bonus payments, the time given in the Bid for completion of the whole works or any section(s) is fixed and unless otherwise agreed, no adjustment of the time by reasons of granting an extension of time pursuant to clause 8.4 or any other clause of these conditions will be allowed. Any period falling short of completed month shall be ignored for the purpose of computing the period relevant for the payment of bonus.

Clause 13, Sub – Clause 13.8: Adjustment for changes in cost
Annexure 2 to Section 7

Percentages governing Price adjustment

Coefficients governing the adjustment of changes in cost

S. No.	Cost Element	Symbol	Bill of Quantity wise % component										
			Bill No. 1, 2A, 3 , 5A, 7A	**Bill No. 4B**	**Bill No. 2C**	**Bill No. 6, 9, 10 & 4A**	**Bill No. 2B, 5B, 7B**	**Bill No.8**	**Bill No. 16 to 33**	**Bill No. 11 Gr A**	**Bill No. 11 Gr B**	**Bill No. 11 Gr C**	**Bill No. 11 Gr D**
1	Fixed	Px	15	15	15	15	15	15	15	15	As per Clause 13.8 (xi) of GCC.	15	15
2	Labour	Pl	15	5	5	25	15	5	15	5		5	65
3	Steel	P_s	0	75	75	20	50	0	20	35		35	0
4	Cement	P_c	0	0	0	15	0	75	10	0		0	10
5	Plant Machinery & Spares	P_p	20	0	0	0	10	0	10	0		0	0
6	Fuel and Lubricants	P_f	35	5	5	10	5	5	5	5		5	10
7	Other materials	P_m	15	0	0	15	5	0	15	0		0	0
8	Other Non Ferrous Metals	P_{cp}	0	0	0	0	0	0	10	40		40	0
	Total		**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**		**100**	**100**

Bill No 11 : Group A **Series 36 & NS,** Group B**Series 37** &
Group C **Series 38, 40 (Item No.40001 to 40356) & NS**; S&T (Supply)

Bill No 11 : Group D **Series 39, 40 (Item No. 40501 to 40851) & NS ;** S&T (Installation)

Note:- The price variation will be as per relevant clause no. 13.8 (C) (viii), (ix), & (x) of GCC for catenary wire, contact wire, steel structures & traction transformer.

***

Annexure 3 to Section 7

36

रेल विकास निगम लिमिटेड
Rail Vikas Nigam Limited
गुणवत्ता, गति एवं पारदर्शिता
(A Government of India Enterprise)

CIN : L74999DL2003GOI118633

No. C/Policy/Arbitration/2007-08 Dated: 01.10.2020

All ED(Projects), GGMs, CPMs, GMs and AGMs
RVNL

Sub: Fee Structure for Arbitrators/Conciliators

Ref: This office letter of even no. dated 19.11.2018

In supersession of letter under reference, fee structure for Arbitration/Conciliation cases shall be as indicated below:

(a) In case of External Arbitrators (Retired Officers /Officers other than working in RVNL):

S. No.	Particulars	Maximum amount payable per Arbitrator/Conciliator, per case	
1.	Arbitrator's Fee	The Fee shall be as given below:	
		Sum in Dispute	**Fee for Each Arbitrator**
		Upto Rs.5.00 Lakh	Rs.45,000
		Above Rs.5.00 lakh and upto Rs.20.00 lakh	Rs.45,000 plus 3.5% of the claim amount over * above Rs.5.00 lakh
		Above Rs.20.00 lakh and up to Rs.1.00 crore	Rs.97,500 plus 3% of the claim amount over * above Rs.20.00 lakh
		Above Rs.1.00 crore and up to Rs.10.00 crore	Rs.3,37,500 plus 1% of the claim amount over & above Rs.1.00 crore
		Above Rs.10.00 crore and up to Rs.20.00 crore	Rs.12,37,500 plus 0.75% of the claim amount over & above Rs.10.00 crore
		Above 20.00 crore	(Rs.19,87,500 plus 0.5% of the claim amount over and above Rs.20.00 crore), **with overall ceiling of Rs.30.00 lakh.**
		NOTES: (i) **"Sum in Dispute"** shall include both claim and counter claim amounts i.e. the fee of the Arbitral Tribunal is fixed on the cumulative value of the claim and counter claim. (ii) The overall maximum ceiling of Fee for each	

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Tel : +91-11-26738299, Fax : +91-11-26182957, Email : info@rvnl.org, Web : www.rvnl.org

CIN : L74999DL2003GOI118633

रेल विकास निगम लिमिटेड
Rail Vikas Nigam Limited
गुणवत्ता, गति एवं पारदर्शिता
(A Government of India Enterprise)

S. No.	Particulars	Maximum amount payable per Arbitrator/Conciliator, per case
		arbitrator is Rs. 30 Lakh. (iii) In the event, the Arbitral Tribunal is a sole arbitrator, he/she shall be entitled to an additional amount of twenty-five percent on the fee payable as above. (iv) The Arbitral Tribunal's fee shall be inclusive of all charges such as Studying of documents and Publishing/Declaration of Award. (v) The Arbitral Tribunal's fee shall be payable in stages: (a) 15% of fee – After 1st (Preliminary) Hearing (b) 15% of fee – On Completion of Pleadings by both Parties (c) 25% of fee – On Completion of the Claimant's Arguments (d) 25% of fee – On Completion of the Respondent's Arguments (e) 20% of fee – On Conclusion of Rejoinder(s)by both Partiesi.e. After Final Hearing
2.	Conciliator/Mediator/Dispute Adjudication Board Member Fee	Rs. 40,000/- per sitting
3.	Secretarial Assistance &Incidental Charges (phone, postage etc.)	Rs.30,000/- (lumpsum per case)
4.	Other Expenses :	Actual against bills subject to the prescribed ceiling given below applicable for the days of hearing only :
i)	Travelling Expenses	Economy Class (by air), first class AC (by train) and AC Car (By Road)
ii)	Lodging and Boarding Expenses	(a) Rs.10,000/-+ GST per day (In Metro cities) (b) Rs.7,500/- + GST per day (in other cities) (c) Rs.3,000/- + GST per day, if any arbitrator does not stay in the hotel as mentioned at (a) and (b) above **NOTES :** 1. Lodging, Boarding and Travelling Expenses shall be allowed for those members who are residing 100 Km away from place of hearing. 2. Delhi, Mumbai, Chennai, Kolkata, Bangalore and Hyderabad shall be considered as Metro cities.
5.	Local Travel	Rs.2,000/- per day

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CIN : L74999DL2003GOI118633

(b) **In case of Departmental Officers of RVNL:**

S. No.	Particulars	Maximum amount payable per Arbitrator/Conciliator, per case
1	Arbitrator/Conciliator's Fee	Rs.25,000/- per Hearing/Sitting subject to a maximum ceiling of Rs.12 Lakh per case. **Note:** The above fee shall be payable for maximum of 3 internal meetings by the Arbitral Tribunal for finalization of award without the presence of the parties involved, subject to a maximum ceiling of Rs.30 Lakh per case.
2	Studying of documents	Rs.15,000/-
3	Secretarial Assistance	Rs.18,000/-
4	Charges for publishing Arbitral Award	Maximum Rs.18,000/- to be fixed by Arbitrator.

(c) All the fees and charges are to be shared equally between RVNL and the other party to the dispute.

(d) The fee shall be exclusive of GST to be borne on RCM basis by both the parties on their respective share of fee.

This issues with the approval of CMD/RVNL

01/10/2020.
GM(Projects)

Copy to:

1. Secy. to CMD – for kind information of CMD
2. DP, DO, DPE and CFO – for kind information
3. All PEDs and EDs in Corporate Office – for kind information

Rail Vikas Nigam Limited

(A Govt. of India Enterprise)

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Tel: +91 11 26738299 Fax +91 11- 26182957; Web :www.rvnl.org

No. RVNLCO/CIV/PJCL(ARBT)/1/2021/Tender Cell/CO Date:13.07.2021

ALL ED(Projects)/CPMs/GGMs/GMs,
RVNL.

Sub : Procedure for Amicable Settlements.
Ref: : This office letter #C/Policy/Arbitration/2007-08 dated 26.12.2018.

In supersession to procedure issued for amicable settlement in contracts vide above referred letter, the following procedure is issued for amicable settlement in contracts:

1. Amicable Settlement Committee at senior management level shall make an attempt to resolve the issues/disputes within 90 days of request by the contractor. In case of non-resolution within 90 days, 45 days extension can be agreed by the Parties. Extension beyond 135 days but not exceeding 225 days has to be approved by the concerned Director duly considering reasons for delay brought out by the convenor of the Committee in the proposal for extension. If the Committee is unable to reach amicable settlement within 225 days, the Convenor of the committee shall communicate the same to the contractor and concerned PIU / RVNL to proceed further as per contract conditions.

   In exceptional circumstances resulting in non-settlement within 225 days, the convenor may seek further extension from CMD RVNL explaining the circumstances of the case.

2. The committee shall comprise of the following:-
   i. ED(P)/ED/PED (in the same order) directly in-charge of the project;
   ii. Concerned finance officer (one level higher than the officer who has dealt the case at PIU level) and
   iii. ED/PED (in the same order) directly in-charge of the project of other discipline(s) in case the issues involve other discipline(s) of the engineering.

3. Whenever the contractor submits a request for amicable settlement, CPM in-charge of the project should forward the same to

VIKAS AWASTHI Date: 2021.07.13 15:45:05 +05'30'

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ED(P)/ED/PED (in the same order) directly in-charge of the project. ED(P)/ED/PED on receipt of the same shall issue a note to the concerned finance officer and concerned ED/PED of other discipline in case the issues involved other discipline(s) of engineering, about the request for amicable settlement to be dealt by them and fix a date in consultation with them for a hearing. The date should then be communicated to the CPM, GM/GGM of other department (if the issues involved their department) and contractor for presenting their case before the Amicable Settlement Committee.

4. This being an additional workload like arbitration, the Committee members shall be paid fee by RVNL at the rates payable to the Arbitrators of RVNL. In case, where settlement could not be reached within 225 days and no further extension is granted by CMD RVNL, the committee members shall only be entitled for 50% of the prescribed fee for such unsettled case. If any member has already been paid fee in excess of 50% of the prescribed fee, it should be returned to RVNL.

This issues with the approval of CMD/RVNL.

VIKAS AWASTHI Date: 2021.07.13 15:45:37 +05'30'

ED Planning

Copy to:

i. Secy to CMD for kind information of CMD please.
ii. DP, DO, DPE & DF for kind information please.
iii. All PEDs & EDs in Corporate Office - for information please.

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Tel: +91 11 26738299 Fax +91 11- 26182957; Web: www.rvnl.org

No. C/RVNL/065/2021 Date:28.12.2023

ALL EDs/CPMs/GGMs/GMs,
RVNL.

Sub : **Amendment #81 to SBD of Construction Contracts.**
Ref 1 Letter #C/Policy/SBD/2012 dated 07.12.2012 w.e.f. 07.12.2012.
2 RVNL CO's letter #ED-Genl/20 dated 30.05.2021

In the SBD of Construction Contracts of Single and Multiple Packages, in Section 7 Part – B Particular Conditions of Contract, letter under Ref 2 above, pertaining to 'Discharge of obligations as Principal Employer towards Royalty in construction contracts of RVNL', is appended as Annexure 6 with immediate effect.

Modified SBDs of Construction Contracts of Single and Multiple Packages are also being uploaded on the e-office.

Vikas Awasthi
Digitally signed by Vikas Awasthi
Date: 2023.12.28 15:42:18 +05'30'

ED Planning

Copy to:

i. **Secy to CMD** - for kind information of CMD please.
ii. **DP, DO, DPE & DF** - for kind information please.
iii. **All PEDs** - for kind information please.

Annexure 6

Rail Vikas Nigam Limited

(A Govt. of India Enterprise)

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Tel: +91 11 26738299 Fax +91 11- 26182957; Web :www.rvnl.org

No. ED-Genl/20 Date:30.05.2021

All EDs / CPMs,

Subject : **Discharge of obligations as Principal Employer towards Royalty in construction contracts of RVNL.**

Discharge of obligations towards Royalty in respect of construction contracts is rightfully the complete responsibility of the Contractor. Even being a Principal Employer, it is not possible for RVNL to ensure that the Contractor is following all the regulations in force. Further, even if RVNL intends to do it, RVNL/PMC does not have wherewithal to ensure that these are being scrupulously followed. It is the legitimate job of concerned agencies dealing with these regulations to get the regulations implemented.

However, considering the sensitivity of the matter, RVNL can do what is possible. RVNL should follow a policy where compliance is rightfully the complete responsibility of the Contractor and we obtain an undertaking for this from Contractor on regular basis. This will make Contractor to be more vigilant. In view of this, we should implement the below mentioned guidelines:

a. Royalty is a comprehensive subject covered through Minor Mineral Acts of respective State Governments. RVNL cannot get into the nitty-gritty of the Royalty payments by the Contractor. Royalty is a comprehensive arrangement between Contractor and the competent Revenue Authority of the State Government.
b. RVNL, as a Principal Employer, should ask the Contractor to give an Undertaking along with each bill, where royalty is applicable, that he has fulfilled the statutory requirements of Royalty as per applicable Acts of the State Government. Contractor will further indemnify RVNL by giving an Indemnity Certificate along with each bill. This will make Contractors responsible towards this.
c. Similar arrangement will be applicable where there is change in Royalty charges. The Contractor will give an Undertaking for having made payment of increased royalty along with the Indemnity Certificate.
d. Before release of Performance Security, Contractor should be additionally asked to give a final Affidavit of having complied with royalty responsibility for the contract.

VIKAS AWASTHI Date: 2021.05.30 14:07:44 +05'30'

This will avoid dispute between PMC/RVNL and the Contactor for an arrangement which is completely between Contractor and Revenue Authority. Further, it will make PMC/RVNL officials to concentrate on job of fast track implementation of projects with highest quality of work. Presently substantial time is getting wasted in solving these disputes.

In case RVNL receives the notice from the Revenue Authority for any such pending payment by the Contractor, RVNL, based on undertaking given by the Contractor will give Show Cause Notice to the Contractor, to be replied within a fixed time period, to get 'No dues Certificate' from the concerned Revenue Authority. Till the time, Contractor gets "No dues Certificate", the payment of the amount as informed by the State Government authority will be withheld from the due payments of the Contractor. As a matter of abundant caution, to avoid any fraudulent activity, the authenticity of such "No Dues" as and when submitted shall be got verified from the State Government authority, which issued the "No Dues Certificate".

This should be made applicable universally in all the contracts in force.

This issues with approval of CMD RVNL.

Encl.:

1. Proforma for undertaking in form of Indemnity Bond.
2. Proforma for Show Cause Notice.

VIKAS AWASTHI Date: 2021.05.30 14:08:23 +05'30'

ED / PLG

Copy to:

1. **Secy to CMD- for kind information of CMD.**
2. **DP, DP & DF**
3. **Pr Adv P**
4. **All PEDs**

Proforma for **Indemnity Bond**

INDEMNITY BOND FOR THE COMPLIANCE OF ROYALTY OBLIGATIONS BY THE CONTRACTOR SUBMITTED ALONG WITH IPC NO. .....DATED.....

(To be executed on Non-Judicial Stamp Paper of Appropriate Value and notarised)

THIS INDEMNITY BOND made on this _____ day of _____ 20___ by _____(insert the name of the Contractor and its registered address) (hereinafter called "the Contractor"), which expression shall where the context do admits or implies be deemed to include its executors, administrators and assigns, in favour of Rail Vikas Nigam Ltd., ...(address) (hereinafter referred as `RVNL' or "the Employer") on the other part.

WHEREAS by an Agreement / Letter of Acceptance No._____dated _____ (Insert document number) (hereinafter called "the Agreement"), the Contractor has agreed to execute the work (Name of Work) (hereinafter called "the Project").

AND WHEREAS the General Conditions of the Agreement caste an obligation on the Contractor to comply with all the Laws, pay all taxes, duties, fees, royalty, etc. and comply with all obligations under the Contract. The relevant conditions are as under:

i) 1.13 Compliance with Laws

The Contractor shall, in performing the Contract, comply with applicable Laws. Unless otherwise stated in the Special Conditions of Contract:

The Contractor shall give all notices, pay all taxes, duties and fees, and obtain all permits, licences and approvals, as required by the Laws in relation to the execution and completion of the Works and the remedying of any defects; and the Contractor shall indemnify and hold the Employer harmless against and from the consequences of any failure to do so.

ii) 7.8 Royalties

Unless otherwise stated in the Specification, the Contractor shall pay all royalties, rents and other payments for:

(a) natural Materials obtained from outside the Site, and

(b) the disposal of material from demolitions and excavations and of other surplus material (whether natural or manmade), except to the extent that disposal areas within the Site are specified in the Contract.

11.10 Unfulfilled obligations

After the Performance Certificate has been issued, each Party shall remain liable for the fulfilment of any obligation which remains unperformed at that time. For the purposes of determining the nature and extent of unperformed obligations, the Contract shall be deemed to remain in force.

AND WHEREAS the Contractor confirms that under the Agreement, compliance of all the Laws and payment of Royalty, rents, etc. and other payment are exclusive obligations of the Contractor.

NOW THIS INDEMNITY BOND WITNESSETH as follows:

1. That the Contractor confirms that it is absolutely responsible for the compliance of all the relevant Laws applicable to mining, extraction,

transportation and use of Minor Mineral in the jurisdiction of the respective State(s). The Contractor undertakes to keep the Employer harmless against any claim/ liability/ cost, on account of non-compliance of any obligation under any Law.

2. That the Contractor confirms that it has complied with all the Laws including payment of Royalty, rent, etc. to the respective State(s) Government on the minor mineral consumed for executing the value of the work claimed by it in the Interim Payment Certificate (IPC).

3. That this Indemnity Bond is irrevocable. If at any time, any notice is received by the Employer about non-payment of royalty, rent, etc. on the minor mineral consumed in the work, or any demand or non-compliance of any Law by the Contractor, then the Contractor shall immediately take steps to pay the royalty etc. and comply with the obligation.

4. That in case of failure the Contractor hereby agrees that the Employer has the right to assess the amount and withhold the same. The said assessment of the amount by Employer to be withheld shall be final and binding on the Contractor without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to the Employer against the Contractor under the Agreement or under this Indemnity Bond. Contractor shall not be entitled for any interest on the withheld amount.

5. That the Contractor shall be entitled for release of balance withheld amount after deduction of amount paid by Employer to Authorities and all cost incurred by it. The balance amount, if any, shall be paid only after the Contractor submits a “No Due Certificate” from the respective Authority and after the Employer has verified the authenticity of the same from the said Authority.

6. In case, the Contractor fails to submit “No Dues Certificate” in a reasonable period of time or Employer finds out that the “No Dues Certificate” submitted

by the Contractor is not authentic, the Contractor shall remain liable under the Contract and under this Indemnity Bond. The Employer in such a case shall pay to the relevant Authority the withheld amount or the amount found payable to the Contractor under the Contract.

7. That if the Contractor at any time commits any default in compliance of its obligation under any law, contract provisions or where any notice is received or the Employer get information for any other source, the Employer has the right to recover/ withheld the total amount along with cost/ expenditure assessed by the Employer from any amount due to the Contractor. In case no amount is payable by the Employer, it shall call upon Contractor to settle the issue and deposit the said amount. The same shall be complied with the Employer in time bound manner.

8. That the non-observance of the obligations by the Contractor under this Indemnity Bond or Agreement shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purposes and shall be subject to all legal / penal consequences. The Contractor shall be also liable for all the total cost/ expenditure incurred by the Employer along with interest @ 18% p.a.

IN WITNESS WHEREOF, the Contractor has hereunto set its hand through its authorized representative, the day, month and year first above mentioned.

Signed, Sealed and Delivered by the said Contractor

(Contractor's Name)

Dated: ..... (AUTHORISED SIGNATORY)

Place: ..... SEAL OF COMPANY

IN THE PRESENCE OF:

WITNESS: SIGNATURE _____

NAME: _____

ADDRESS : _____

Proforma for Show Cause Notice

SHOW CAUSE NOTICE

[Insert date]

To:
(Insert Contractors name and address)
……
……

Kind Attn: ……..*(Insert name of the representative)*

Sub : Show Cause Notice under Clause _____

Ref 1 Contract Agreement No …… / Letter of Award No……..*(Insert Document no.)*

2 Notice received from ……vide letter no……*(Insert Document no.)*

(1) You have been submitting Indemnity Bond for complying with all the applicable Laws and payment of royalties, rent, etc. on minor minerals along with each Interim Payment Certificate.

(2) The Employer is in receipt of notice vide reference 2 above from …….. *(Insert authority name.)* (Copy enclosed for ready reference) stating that Rs. _____ *(Insert amount)* is outstanding towards minor, minerals used for executing the works under the above referred contract and/ or ……*(Insert any other violation notified* and any demand, if any, on RVNL*)*.

(3) From the above notice, it is apparent that you have violated. Clause No.____ and _____ of the Agreement and have also violated the Indemnity Bonds submitted by you along with Interim Payment Certificate (IPCs).

(4) The amount indicated in the notice or as assessed by RVNL is being withheld from your dues forthwith. You are called upon to settle the said notice dt._____ immediately under intimation to RVNL. You are also called upon to submit `No Due Certificate' from the concerned authorities and submit all documents demonstrating compliance with the applicable Laws.

(5) You are hereby given a Show Cause Notice to state that, as to why action should not be initiated against you for breach of contract conditions and violation of the Indemnity Bond, within 7 days of issue of this notice. Take note that in case of no reply or non-receipt of satisfactory reply appropriate action shall be initiated against you under the Contract provision and law.

Yours sincerely
(Employer)

Section 8

Contract Forms

Section 8 - Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.

All italicized text is for guidance how to prepare the various forms and shall be deleted from the final documents.

Table of Forms

Letter of Acceptance Form No. COF/1…….…….. 2
Contract Agreement Form No. COF/2…...……...……..3
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Proforma for Bank Guarantee for Advance against Supply of Plant and Materials ……17
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FORM OF SURETY BOND (Performance Security/Additional Performance Security)..24

FORM No. COF/1

Letter of Acceptance

[on letter head paper of the Employer]

. . . . . date. . . . . .

To: . …. . .[name and address of the Contractor] . . . . . .

Subject:. . . . [Insert Name and Identification number]……..[Notification of Award]…..

This is to notify you that your Bid dated . . . . [Insert Date]. . . for execution of the . . . [name of the contract and identification number, as given in the Contract Data] . . . for the Accepted Contract Amount of the equivalent of INR . . . [Insert amount in numbers and words and name of the currency]. . , as corrected and modified in accordance with the Instructions to Bidders, is hereby accepted.

You are requested to furnish the Performance Security within 28 days in accordance with theConditions of Contract, using for that purpose the of the Performance Security Form No. COF/3 included in Section 8 (Contract Forms) of the Bidding Document.

Authorized Signature:
Name and Title of Signatory:

Copy to:

Jurisdictional GST Assessing Officer of Sole Entity / JV (in case GST of JV is not available, the same should be advised separately after obtaining details from the bidder) and Specialist sub-contractor (if any).

FORM No. COF/2

Contract Agreement

THIS AGREEMENT made the . . . . . .day of . . . ., between . . . . . [N*ame of the Employer. . .. .* (hereinafter "the Employer"), of the one part, and . . . . . [*name of the Contractor***]***. . [1]. . .*(hereinafter "the Contractor"), of the other part:

WHEREAS the *Employer* desires that the Works known as . . . . . [*name of the Contract***]***. . . . .*should be executed by the Contractor, and has accepted a Bid by the Contractor for the execution and completion of these Works and the remedying of any defects therein,

The Employer and the Contractor agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.

(b) - the Letter of Acceptance

(c) - the Letter of Technical Bid

(d) - the Letter of Price Bid

(e) - the Addenda Nos. . . . . [***insert addenda numbers if any***]*. . . . .*

(f) - the Special Conditions of Contract

(g) Part A : Contract Data

(h) Part B : Specific Provisions

(i)- the General Conditions of Contract;

(j)- the Specification

(k) - the Drawings*;*

(l)- the Work's Requirements

(m)- the completed Schedules including (priced Bill of Quantities)

(n) - Any other documents

---

[1]*In case Contractor is a Joint Venture the 'name of the contractor' shall be inserted as under :*
"the Joint Venture under the name and title of ……, comprising of ….[Lead Partner] ;…….; and ….."

3. In consideration of the payments to be made by the Employer to the Contractor as indicated in this Agreement, the Contractor hereby covenants with the Employer to execute the Works and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of . . . . . [*name of the borrowing country*]. . . . .on the day, month and year indicated above.

Signed by	Signed by.....
for and on behalf of the Employer in the presence of	for and on behalf the Contractor in the presence of
Witness, Name, Signature, Address, Date	Witness, Name, Signature, Address, Date

COF/3

FORM OF CONTRACT PERFORMANCE SECURITY
(BANK GUARANTEE)
[Refer Clause 41 of Instructions to Bidders]

(On non-judicial stamp paper of the appropriate value in accordance with stamp Act. The stamp paper to be in the name of Executing Bank).

From:

Name and Address of the Bank…..

……..

To:

CPM/GM, RVNL (PIU name and address)
for and on behalf of
The Chairman and Managing Director,
Rail Vikas Nigam Limited,
World Trade Center, Tower A 6th to 9th floor, Nauroji Nagar
New Delhi-110 029

WHEREAS, Rail Vikas Nigam Limited, hereinafter called the Employer, acting through ***[Insert Designation and address of the Employer's Representative]***, has accepted the bid of ***[Insert Name and address of the Contractor]***, hereinafter called the Contractor, for the work of [Insert Name of Work], vide Notification of Award No.***[Insert Notification of Award No.]***.

AND

WHEREAS, the contractor is required to furnish Performance Security for the sum of ***[Insert Value of Performance Security required]***, in the form of bank guarantee, being a condition precedent to the signing of the contract agreement.

WHEREAS, ***[Insert Name of the Bank]***, with its Branch ***[Address]*** having its Headquarters office at ***[Address]***, hereinafter called the Bank, acting through ***[Designation(s) of the authorised person of the Bank]***, have, at the request of the ***[Insert name of the JV partner]***, a JV partner on behalf of the contractor, agreed to give guarantee for performance security and additional performance security as hereinafter contained:

1. KNOW ALL MEN by these present that I/We the undersigned ***[Insert name(s) of authorized representatives of the Bank]***, being fully authorized to sign and incur obligations for and on behalf of the Bank, confirm that the Bank, hereby, unconditionally and irrevocably guarantee to pay the Employer the full amount in the sum of [Insert Value of Performance Security required] as above stated.

2. The Bank undertakes to immediately pay on presentation of demand by the Employer any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the Employer on the Bank shall be final, conclusive and binding, absolute and unequivocal notwithstanding any disputes raised/ pending before any Court, Tribunal, Arbitration or any Authority or any threatened litigation by the Employer of Bank.

3. On payment of any amount less than aforementioned full amount, as per demand of the Employer, the guarantee shall remain valid for the balance amount i.e. the aforementioned full amount less the payment made to the Employer.

4. The Bank shall pay the amount as demanded immediately on presentation of the demand by Employer without any reference to the contractor and without the Employer being required to show grounds or give reasons for its demand or the amount demanded.

5. The Bank Guarantee shall be unconditional and irrevocable.

6. The guarantee hereinbefore shall not be affected by any change in the constitution of the Bank or in the constitution of the Contractor.

7. The Bank agrees that no change, addition, modifications to the terms of the Contract Agreement or to any documents, which have been or may be made between the Employer and the Contractor, will in any way release us from the liability under this guarantee; and the Bank, hereby, waives any requirement for notice of any such change, addition or modification to the Bank.

8. This guarantee is valid and effective from the date of its issue, which is ***[insert date of issue]***. The guarantee and our obligations under it will expire on ***[Insert the date twenty eight days after the expected end of defect liability period]***. All demands for payment under the guarantee must be received by us on or before that date.

9. The Bank agrees that the Employers right to demand payment of aforementioned full amount in one instance or demand payments in parts totalling up to the aforementioned full amount in several instances will be valid until either the aforementioned full amount is paid to the Employer or the guarantee is released by Employer before the Expiry date.

10. The Bank agrees that its obligation to pay any amount demanded by the Employer before the expiry of this guarantee will continue until the amount demanded has been paid in full.

11. The expressions Bank and Employer herein before used shall include their respective successors and assigns.

12. The Bank hereby undertakes not to revoke the guarantee during its currency, except with the previous consent in writing of the employer. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.

13. The Guarantee shall be in addition to and without prejudice to any other security Guarantee (s) of the contractor in favour of the Employer available with the Employer. The Bank, under this Guarantee, shall be deemed as Principal Debtor of the Employer.

Date ……

Place……. [Signature of Authorised person of Bank]

…….
[Name in Block letters]
…….
[Designation]
…….
[P/Attorney] No.
…….
Bank's Seal

[P/Attorney] No.……

Witness:

1. *Signature*
   Name & Address & Seal

2. *Signature*
   Name & address & Seal

Note:

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

2. In case the guarantee is issued by a foreign Bank, which does not have operations in India, the said bank shall have to provide a counter-guarantee by State Bank of India.

3. In case the Contractor is a JV, the Performance Security is required to be furnished on behalf of the JV in favour of the Employer by the JV Partners in proportion of their respective percentage share specified in the JV Agreement. The percentage share of M/s ***[Insert Name of the JV Partner]*** in the JV is ***[Fill share % in the JV]*** percent. All the Bank Guarantee of JV Partners are liable to be encashed cumulatively.

FORM OF ADDITIONAL PERFORMANCE SECURITY (BANK GUARANTEE)

[Refer Clause 35.5 of Instructions to Bidders]

(On non-judicial stamp paper of the appropriate value in accordance with stamp Act. The stamp paper to be in the name of Executing Bank)

From:

Name and Address of the Bank…..
……..

To:

CPM/GM, RVNL (PIU name and address)
for and on behalf of
The Chairman and Managing Director,
Rail Vikas Nigam Limited,
World Trade Center, Tower A 6th to 9th floor, Nauroji Nagar
New Delhi-110 029

WHEREAS, Rail Vikas Nigam Limited, hereinafter called the Employer, acting through ***[Insert Designation and address of the Employer's Representative]***, has accepted the bid of ***[Insert Name and address of the Contractor]***, hereinafter called the Contractor, for the work of [Insert Name of Work], vide Notification of Award No.***[Insert Notification of Award No.]***.

AND

WHEREAS, the contractor is required to furnish additional Performance Security for the sum of ***[Insert Value of additional Performance Security required]***, in the form of bank guarantee, being a condition precedent to the signing of the contract agreement.

WHEREAS, [Insert Name of the Bank], with its Branch ***[Address]*** having its Headquarters office at ***[Address]***, hereinafter called the Bank, acting through ***[Designation(s) of the authorised person of the Bank]***, have, at the request of the ***[Insert name of the JV partner]***, a JV partner on behalf of the contractor, agreed to give guarantee for additional performance security as hereinafter contained:

1. KNOW ALL MEN by these present that I/We the undersigned ***[Insert name(s) of authorized representatives of the Bank]***,being fully authorized to sign and incur obligations for and on behalf of the Bank, confirm that the Bank, hereby, unconditionally and irrevocably guarantee to pay the Employer the full amount in the sum of ***[Insert Value of additional Performance Security required]***as above stated.

2. The Bank undertakes to immediately pay on presentation of demand by the Employer any amount up to and including aforementioned full amount without any demur, reservation or recourse. Any such demand made by the Employer on the Bank shall be final, conclusive and binding, absolute and unequivocal notwithstanding any disputes raised/ pending before any Court, Tribunal, Arbitration or any Authority or any threatened litigation by the Employer of Bank.

3. On payment of any amount less than aforementioned full amount, as per demand of the Employer, the guarantee shall remain valid for the balance amount i.e. the aforementioned full amount less the payment made to the Employer.

4. The Bank shall pay the amount as demanded immediately on presentation of the demand by Employer without any reference to the contractor and without the Employer being required to show grounds or give reasons for its demand or the amount demanded.

5. The Bank Guarantee shall be unconditional and irrevocable.

6. The guarantee hereinbefore shall not be affected by any change in the constitution of the Bank or in the constitution of the Contractor.

7. The Bank agrees that no change, addition, modifications to the terms of the Contract Agreement or to any documents, which have been or may be made between the Employer and the Contractor, will in any way release us from the liability under this guarantee; and the Bank, hereby, waives any requirement for notice of any such change, addition or modification to the Bank.

8. This guarantee is valid and effective from the date of its issue, which is [insert date of issue]. The guarantee and our obligations under it will expire on ***[Insert the date twenty eight days after the expected end of defect liability period]***. All demands for payment under the guarantee must be received by us on or before that date.

9. The Bank agrees that the Employers right to demand payment of aforementioned full amount in one instance or demand payments in parts totalling up to the aforementioned full amount in several instances will be valid until either the aforementioned full amount is paid to the Employer or the guarantee is released by Employer before the Expiry date.

10. The Bank agrees that its obligation to pay any amount demanded by the Employer before the expiry of this guarantee will continue until the amount demanded has been paid in full.

11. The expressions Bank and Employer herein before used shall include their respective successors and assigns.

12. The Bank hereby undertakes not to revoke the guarantee during its currency, except with the previous consent in writing of the employer. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.

13. The Guarantee shall be in addition to and without prejudice to any other security Guarantee(s) of the contractor in favour of the Employer available with the Employer. The Bank, under this Guarantee, shall be deemed as Principal Debtor of the Employer.

Date …….

Place……. [Signature of Authorised person of Bank]

…….
[Name in Block letters]
…….
[Designation]
…….
[P/Attorney] No.
…….
Bank's Seal

[P/Attorney] No.……

Witness:

1. *Signature*
   Name & Address & Seal

2. *Signature*
   Name & address & Seal

Note:

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

2. In case the guarantee is issued by a foreign Bank, which does not have operations in India, the said bank shall have to provide a counter-guarantee by State Bank of India.

3. The Bank Guarantee should be duly attested by Notary public with notarial stamp of appropriate value affixed thereon.

4. In case the Contractor is a JV, the additional Performance Security is required to be furnished on behalf of the JV in favour of the Employer by the JV Partner(s) who is responsible for execution of schedule(s) (as per JV agreement) against which additional Performance Security is required to be submitted in terms of ITB 35.5. All the Bank Guarantee of JV Partners are liable to be encashed cumulatively.

Advance Payment Security

[Refer Clause 14.2 of GCC]

(On non-judicial stamp paper of appropriate value in accordance with stamp Act. The stamp paper to be in the name of Executing Bank)

From
[Name and Address of the Bank]

To

CPM/GM, RVNL (PIU name and address)

for and on behalf of
The Chairman and Managing Director,
Rail Vikas Nigam Limited,
World Trade Center, Tower A 6th to 9th floor, Nauroji Nagar
New Delhi-110 029

Beneficiary: Rail Vikas Nigam Limited.

Guarantee No.: *[reference number of the guarantee]* **Dated**: *[……..]*

WHEREAS, Rail Vikas Nigam Limited **(hereinafter called the Employer)** has entered into Contract No. ***[….reference number of the Contract….]***dated ***[……]*** for the execution of ***[name of the contract]*****(hereinafter called the Contract)** with***[….name of the Contractor….]*****(hereinafter called the Contractor)**.

WHEREAS, according to the Conditions of the Contract, an advance payment is admissible to the contractor against submission of bank guarantee(s).

At the request of the Contractor, we ***[….name of the Bank….]*** with our branch at***[….address….]***,having our Head Office at ***[….address….]*****(hereinafter called the Bank)** have, at the request of ***[.....Insert name of the JV partner.....]***, a JV partner on behalf of the Contractor, agreed to give the said guarantee as hereinafter contained:

1. KNOW ALL MEN by these present that I/We the undersigned ***[….Insert name(s) of authorized representative(s) of the Bank….]***, being fully authorized to sign and incur obligations for and on behalf of the Bank, confirm that the Bank, hereby, unconditionally and irrevocably guarantees to pay the Employer the sum

of Rs.**[….value in figure….]**(Rupees ***[….value in words….]*** only**(hereinafter called the Full Amount)**.

2. The Bank undertakes to immediately pay to the Employer, without any demur, reservation or recourse, any amount up to and including aforementioned full amount upon first written demand/demands from the Employer.

3. On payment of any amount less than aforementioned full amount, as per demand of the Employer, the guarantee shall remain valid for the balance amount i.e. the aforementioned full amount less the payment made to the Employer.

4. The Bank shall pay the amount so demanded without any reference to the contractor and without the Employer being required to show grounds or give reasons for its demand or the amount demanded.

5. The guarantee hereinbefore shall not be affected by any change in the constitution of the Bank, the Contractor or the Employer.

6. The Bank agrees that no change, addition, modification to the terms of the Contract Agreement or to any document, which have been or may be made between the Employer and the Contractor, will in any way release us from the liability under this guarantee; and the Bank, hereby, waives any requirement for notice of any such change, addition or modification to the Bank.

7. This guarantee is valid and effective from the date of it's issue, which is ***[….date of issue….]***. The guarantee and our obligations under it will expire on dated ***[….Please refer note 4 & 5….]***. All demands for payment under the guarantee must be received by us on or before that date.

8. The Bank agrees that the Employer's right to demand payment of aforementioned full amount in one instance or demand payments in parts totalling up to the aforementioned full amount in several instances will continue until either the aforementioned full amount is paid to the Employer or the guarantee validity period expires.

9. The Bank agrees that it's obligation to pay any amount demanded by the Employer before the expiry of this guarantee will continue until the amount demanded has been paid in full.

10. The expressions Bank and Employer herein before used shall include their respective successors and assigns.

11. The Bank hereby undertakes not to revoke the guarantee during its currency, except with the previous consent in writing of the employer. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.

Dated[.....]
Place[.....]

.....
(Signature of the Authorized Person of the Bank)

.....
(Name in Block Letters)

.....
(Designation)

.....
(Bank's Seal)

.....
(Authorization No.)

Witness:

.....
Signature, Name & Address

.....
Signature, Name & Address

Note:

1. All italicized text in brackets [….text….] is for guidance on how to prepare this bank guarantee and shall be deleted from the final document.
2. In case the guarantee is issued by a foreign Bank, the said bank shall have operations in India and should be issued by Indian operations branch of the said bank.
3. The Bank Guarantee should be duly attested by Notary Public with notarial stamps of appropriate value affixed thereon.
4. ***Mobilization Advance under GCC 14.2.1***:

    a. For Single Entity
    For each Instalment of Advance, two Bank Guarantees of equal amounts (each equal to half of the first instalment of advance plus 10%) shall be furnished. Each Bank Guarantee shall be valid for the stipulated completion period of the contract.

    OR

    b. For JV
    For each Instalment of Advance, individual JV partner shall furnish Bank Guarantee equal to his share in the instalment of Advance plus 10%. Each Bank Guarantee shall be valid for the stipulated completion period of the

contract.

5. ***Advance against Plant and Machinery under GCC 14.2.2***:

a. For Single Entity

For each Instalment of Advance, a Bank Guarantee equal to the Instalment of advance plus 10% shall be furnished. The Bank Guarantee shall be valid for the stipulated completion period of the contract.

OR

b. For JV

For each Instalment of Advance, individual JV partner shall furnish a Bank Guarantee equal to his share in the instalment of advance plus 10%. Each Bank Guarantee shall be valid for the stipulated completion period of the contract.

INDEMNITY BOND FOR THE SAFE CUSTODY OF THE PLANT AND MATERIALS SUPPLIED BY THE CONTRACTOR

[Refer Clause 14.5 of GCC]

(To be executed on Non-Judicial Stamp Paper of Appropriate Value and notarised)

THIS INDEMNITY BOND made on this _____ day of _____ 20___ by _____(*insert the name of the Contractor and its registered address*) (hereinafter called "the Contractor") which expression shall where the context do admits or implies be deemed to include its executors, administrators and assigns, in favour of the Rail Vikas Nigam Ltd., World Trade Center, Tower A 6th to 9th floor, Nauroji Nagar New Delhi-110 029
(hereinafter called "RVNL") on the other part.

WHEREAS by an Agreement/Letter of Acceptance No._____dated _____ (hereinafter called "the said agreement"), the Contractor has agreed to execute the _____(*Name of Work*) (hereinafter called "the Works") .

AND WHEREAS the Contractor has submitted to RVNL/ the Engineer for payment on plants &materials procured by him and brought to the site of the Works or his workshop for use in the Works.

AND WHEREAS RVNL/ the Engineer has agreed to make advance/stage payment to the Contractor the total sum of Rs._____ (*in Figures*) [Rupees _____ (*in Words*) in Interim Payment Certificate (IPC) No._____, the quantities and other particulars of which are detailed in this IPC for the said works signed by the Contractor on _____ for the Plant and Materials brought by the Contractor to site of the works or his workshop. Brief details are also mentioned in schedule 1 appended hereto.

NOW THIS INDEMNITY BOND WITNESS that in pursuance of the said agreement and in consideration of the sum of Rs. _____ (*in Figures*) _____ (*in Words*) on or before the execution of these presents to be paid to the Contractor by RVNL so aforesaid, the Contractor doth hereby covenant and agree with RVNL and declare as follows: -

1. That the said sum of Rs. _____ (*In Figures*) _____ (*in Words*) to be paid by RVNL to the Contractor as aforesaid shall be utilized by the Contractor in or towards the execution of the said works and for no other purpose whatsoever.
2. That the Plant and Materials detailed in the said IPC which have been offered to and

accepted by RVNL/ the Engineer, are absolutely the Contractor's own property and free from encumbrances of any kind and the Contractor will not make any application for or receive any further payment on the Plant and Materials which are not absolutely his own property and free from encumbrances of any kind, the Contractor indemnifies the RVNL against all claims on any Plant and Materials in respect of which payment is to be made to him as aforesaid.

3. That the Contractor undertakes that the Plant and Materials shall be used exclusively for the performance / execution of the Contract strictly in accordance with the terms and conditions of the Contract and no part of the Plant and Materials shall be utilized for any other work or purpose whatsoever.

4. That the Contractor is obliged and shall remain absolutely responsible for the safe transit / protection and custody of the Plant and Materials against all risks whatsoever including acts of the God till the Plant and Materials are duly incorporated in the works, commissioned and are taken over by RVNL/Railway (including surplus Plant and Materials, if required as instructed by RVNL/ the Engineer) in accordance with the terms of the Contract. The Contractor undertakes to keep RVNL harmless against any loss or damage that may be caused to the Plant and Materials.

5. That the said Plant and Materials shall not on any account be removed from the site of the works except with the written permission of RVNL/ the Engineer. Further, RVNL/ the Engineer shall always be free at all times to take possession of the materials in whatever form the materials may be in, if in its opinion, the Plant and Materials are likely to be endangered, mis-utilized or converted to uses other than those specified in the Contract, by any acts or omission or commission on the part of the Contractor or any other person or on account of any reason whatsoever and the Contractor binds himself and undertakes to comply with the directions of demand of RVNL to return the Plant and Materials without any demur or reservation.

6. That the said plant and materials shall, at all times, be open to inspection by RVNL/ the Engineer or any authorized representative. In the event of the said material or any part thereof at any time being found to be in lesser quantity than for which payment has been released or the same has been stolen, destroyed or damaged or becoming deteriorated, the Contractor will forthwith replace the same or repair and make good the same as required by RVNL/ the Engineer.

7. That making payment does not mean that Plant and Materials are of required specifications and quality or that whole of the quantity brought to site by Contractor will be used in the work. The Contractor is fully responsible for the materials to conform to required quality and specification and if at any time RVNL/ the Engineer

do not find the material satisfactory, the Contractor at his own cost would replace these. RVNL/ the Engineer would be at liberty to recover cost of these from any dues of the Contractor. Also any Plant and Materials which are in excess of what is finally required under the contract would be the Contractor's property without any liability on RVNL/ the Engineer who would recover the cost of this from the Contractor.

8. That this Indemnity Bond is irrevocable. If at any time, any loss or damage occurs to the Plant and Materials or the same or any part thereof is mis-utilized in any manner whatsoever, then the Contractor hereby agrees that the decision of RVNL/ the Engineer as to assessment of loss or damage to the Plant and Materials shall be final and binding on the Contractor. The Contractor binds itself and undertakes to replace the lost and/or damaged Plant and Materials at its own cost and/or shall pay the amount of loss to RVNL without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to RVNL/ the Engineer against the Contractor under the Contract or under this Indemnity Bond.

9. That if the Contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of those presents, the total amount of the payment shall immediately on the happening of such default be recovered by RVNL/ the Engineer from any dues of Contractor. It is also clearly understood by the Contractor that non-observance of the obligations under this Indemnity Bond by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purpose including legal / penal consequences.

10. IN WITNESS WHEREOF, the Contractor has hereunto set its hand through its authorized representative, the day, month and year first above mentioned.

11. SCHEDULE 1

Particulars of the Plant and Materials	**Quantity**	**Value of the Plant and Materials**

Signed, Sealed and Delivered by the said Contractor

(Contractor's Name)

Dated: ……. (AUTHORISED SIGNATORY)

Place: ……. SEAL OF COMPANY

IN THE PRESENCE OF:

WITNESS: SIGNATURE _____

NAME: _____

ADDRESS : _____

Note:

The contractor has the option to submit the Indemnity Bond to cover all the items and quantities of Plant and Materials of stage payment or to submit indemnity bond each time the stage payment is to be taken or Plant and Materials advance is to be taken.

FORM OF BANK GUARANTEE FOR RELEASE OF BALANCE RETENTION MONEY

(On non-judicial stamp paper of the appropriate value in accordance with stamp Act. The stamp paper to be in the name of Executing Bank).

From:

……..
…….*Name and Address of the Bank*…..
……..

To:

The Chairman and Managing Director,
Rail Vikas Nigam Limited,
World Trade Center, Tower A 6th to 9th floor, Nauroji Nagar
New Delhi-110 029

a) WHEREAS**,** Rail Vikas Nigam Limited, (hereinafter called the **Employer),** acting through ***[Insert Designation and address of the Employer's Representative]***, has entered into a contract with ***[Insert Name and address of the Contractor's Representative]***,, (hereinafter called the **Contractor),** for the work of ***[Insert Name of Work]***, vide Notification of Award No.***[Insert Notification of Award No.].***

b) WHEREAS as per conditions of contract Employer has deducted an amount of RS____***[Insert Amount deducted as retention money]***towards retention money till date, and WHEREAS now the contractor has requested the Employer for releasing the said amount on submission of a bank guarantee of equivalent amount which has been accepted by the Employer.****

OR

WHEREAS as per conditions of contract Employer has deducted an amount of RS_____***[Insert Amount deducted as retention money]***towards retention money till date, out of a total amount of Rs____ [***Insert total Amount of retention money deductable as specified in the contract]***which is due to be deducted as retention money as per Contract agreement and WHEREAS now the Contractor has requested the Employer to accept a bank guarantee of the equivalent amount of the total retention money due as per contract agreement so that the amount already deducted may be released in favour of the contractor and that no further deduction towards retention money will be made in future which has been accepted by the Employer. ****

c) WHEREAS, ***[Insert Name of the Bank]***, with its Branch ***[Address]*** having its Headquarters office at ***[Address]***, hereinafter called the **Bank,** acting through ***[Designation(s) of the authorised person of the Bank]***, have, at the request of the contractor, agreed to give guarantee as hereinafter contained:

1. KNOW ALL MEN by these present that I/We the undersigned ***[Insert name(s) of authorized representatives of the Bank],***being fully authorized to sign and incur obligations for and on behalf of the Bank**,** confirm that the Bank, hereby, unconditionally and irrevocably guarantee the Employer to pay the full amount in the sum of ***[Insert Value of the Bank Guarantee being submitted]*** as above stated.

2. The Bank undertakes to immediately pay to the Employer any amount up to and including aforementioned full amount upon written order/orders from the Employer without any demur, reservation or recourse.

3. On payment of any amount less than aforementioned full amount, as per demand of the Employer, the guarantee shall remain valid for the balance amount i.e. the aforementioned full amount less the payment made to the Employer.

4. The Bank shall pay the amount so demanded without any reference to the contractor and without the Employer being required to show grounds or give reasons for its demand or the amount demanded.

5. The guarantee hereinbefore shall not be affected by any change in the constitution of the Bank or in the constitution of the Contractor.

6. The Bank agrees that no change, addition, modifications to the terms of the Contract Agreement or to any documents, which have been or may be made between the Employer and the Contractor, will in any way release us from the liability under this guarantee; and the Bank, hereby, waives any requirement for notice of any such change, addition or modification to the Bank.

7. This guarantee is valid and effective from the date of it's issue, which is ***[insert date of issue]***. The guarantee and our obligations under it will expire on ***[Insert the date twenty eight days after the expected end of defect liability period.]***. All demands for payment under the guarantee must be received by us on or before that date.

8. The Bank agrees that the Employers right to demand payment of aforementioned full amount in one instance or demand payments in parts

totaling up to the aforementioned full amount in several instances will continue until either the aforementioned full amount is paid to the Employer or the guarantee expires.

9. The Bank agrees that it's obligation to pay any amount demanded by the Employer before the expiry of this guarantee will continue until the amount demanded has been paid in full.

10. The expressions Bank and Employer herein before used shall include their respective successors and assigns.

11. The Bank hereby undertakes not to revoke the guarantee during its currency, except with the previous consent in writing of the employer. This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 758.

Date ……. ……

Place……. [*Signature of Authorised person of Bank]*

[Name in Block letters] …….

[Designation] ……

Address ……..

…….

Witness :

1. *Signature*
   Name & Address & Seal
2. *Signature* *Bank's Seal*
   Name & address & Seal *Authorisation No……...*

Note :

1) *All italicized text is for guidance on how to prepare this bank guarantee and shall be deleted from the final document.*
2) *In case the guarantee is issued by a foreign Bank, the said bank shall have operations in India and should be countersigned by Indian operations branch of the said bank.*
3) *The Bank Guarantee should be duly attested by Notary public with notarial stamps of appropriate value affixed thereon.*
4) ***** strike out whichever is not applicable.*

FORM OF SURETY BOND
[Performance Security/Additional Performance Security]
(Refer Clauses – Clause 41 of ITB and Clause 4.2 of GCC)

From :

Name & Address of the Bank/Insurance Company

_____
_____

To
CPM/GM. RVNL (PIU Name and address)

For and on behalf of
The Chairman and Managing Director,
Rail Vikas Nigam Limited,
World Trade Center, Tower A 6th to 9th floor, Nauroji Nagar
New Delhi-110 029

WHEREAS Rail Vikas Nigam Limited [**Insert Designation and address of the Employer's Representative]** (hereinafter referred to as the `Employer' or `RVNL') has accepted the bid of [Insert Name and Address of the Contractor], (hereafter called the`Contractor') for the work of [Insert Name of Work], vide Notification of Award No. [Insert Notification of Award No.]

AND WHEREAS the Contract requires the Contractor to furnish (Performance Security/Additional Performance Security) for due and faithful performance of its obligations, under and in accordance with the Contract, during the (Construction Period/ Defects Liability Period and Maintenance Period) in a sum of Rs.....…..cr. (Rupees…… crore) (the **"Surety Bond amount"**).

AND WHEREAS we,……..through our branch at ..... (hereinafter referred to as the **"Surety Insurer")** have agreed to furnish this **Surety Bond** by way of Performance security.

NOW, THEREFORE, the **Surety Insurer** hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The **Surety Insurer** herby unconditionally and irrevocably guarantees the due and faithful performance of the Contractor's obligations during the (Construction Period/Defects Liability Period and Maintenance Period under and in accordance with the Contract, and agrees and undertakes to pay to the Employer, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums upto an aggregate sum of the **Surety Bond** Amount as the Employer shall claim, without the Employer being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.

2. A letter from the Employer, under the hand of an officer not below the rank of CPM/GM, RVNL, that the Contractor has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Contract shall be conclusive, final and binding on the **Surety Insurer**. The **Surety Insurer** further agrees that the RVNL shall be the

sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during and under the Contract and its decision that the Contractor is in default shall be final and binding on the **Surety Insurer**, notwithstanding any differences between the Employer and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other Employer or body, or by the discharge of the Contractor for any reason whatsoever.

3. In order to give effect to this **Surety Bond**, the Employer shall be entitled to act as if the **Surety Insurer** were the principal debtor and any/Change in the constitution of the Contractor and/or the **Surety Insurer**, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the **Surety Insurer** under this **Surety Bond**.

4. It shall not be necessary, and the **Surety Insurer** hereby waives any necessity, for the Employer to proceed against the Contractor before presenting to the **Surety Insurer** its demand under this **Surety Bond**.

5. The Employer shall have the liberty, without affecting in any manner the liability of the **Surety Insurer** under this **Surety Bond**, to vary at any time, he terms and conditions of the Contract or to extend the time or period for the compliance with, fulfillment and/ or performance of all or any of the obligations of the Contractor contained in the Contract or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Employer against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Contract and/or the securities available to the Employer, and the **Surety Insurer** shall not be released from its liability and obligation under these presents by any exercise by the Employer of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Employer or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the **Surety Insurer** from its liability and obligation under this **Surety Bond** and the **Surety Insurer** hereby waives all of its rights under any such law.

6. This **Surety Bond** is in addition to and not in substitution of any other **Surety Bond** or security now or which may hereafter be held by the Employer in respect of or relating to the Contractor for the fulfillment, compliance and/or performance of all or any of the obligations of the Contractor under the Contract.

7. Notwithstanding anything contained herein before, the liability of the **Surety Insurer** under this **Surety Bond** is restricted to the **Surety Bond** Amount and this **Surety Bond** will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Employer on the **Surety Insurer** under this **Surety Bond** all rights of the Employer under this **Surety Bond** shall be forfeited and the **Surety Insurer** shall be relieved from its liabilities hereunder.

8. The **Surety Bond** shall cease to be in force and effect on *****[6]Unless a demand or claim under this **Surety Bond** is made in writing before expiry of the Surety Bond, the **Surety Insurer** shall be discharged from its liabilities hereunder.

9. The **Surety Insurer** undertakes not to revoke this **Surety Bond** during its currency, except with the previous express consent of the Employer in writing, and declares and warrants that it has the power to issue this **Surety Bond** and the undersigned has full powers to do so on behalf of the **Surety Insurer**.

10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the **Surety Insurer** at its above referred branch, which shall be deemed to have been duly authorized to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer & the Employer that the envelope was so posted shall be conclusive.

11. This **Surety Bond** shall come into force with immediate effect and shall remain in force and effect for up to the date specified in paragraph 8 above or until it is released earlier by the Employer pursuant to the provisions of the Contract.

12. This **Surety Bond** is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under Article 15(a) is hereby excluded.

Signed and sealed this……..Day ……..,25……at…… SIGNED, SEALED AND DELIVERED

For and on behalf of the **Surety Insurer** by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

Insert date as per Contract Clause 41 of ITB and Clause 4.2 of GCC from the date of issuance of this Surety Bond (in accordance with Clause of the Bid Document). The Contractors can submit the Surety Bond for periods of two years at one time and keep on renewing the same till the DLP is over, if they have problems in getting the Surety Bond in one go for the entire DLP.

रेल विकास निगम लिमिटेड
Rail Vikas Nigam Limited

Volume-II

(Price Proposal)

(For e-tendering through IREPS)

FOR

"Design, Supply, Installation, testing & commissioning of Indoor Signal and Telecommunication work from Mangliyagaon (Incl.) to Budni (Incl.) Section with provision of Electronic Interlocking in 14 stations viz Pannod, Semaliyachau, Chapda, Kheri, Hathnora, Deoli, Kannod, Khategaon, Pipaliya Nankar, Bapcha, Nasrullahganj, Salkanpur, Balkhera, Budni and alteration in existing interlocking system at Mangliyagaon station in connection with New Single Broad Guage Rail Line Between Indore to Budni in the state of Madhya Pradesh, India".

(Based on SBD updated upto Amendment No.87 dated 25.02.2025 for e-tendering

RAIL VIKAS NIGAM LIMITED
World Trade Center, Tower A 6th to 9th floor, Nauroji Nagar New Delhi-110 029
Tel +91-11-26738517
Fax +91-11- 26738592

IFB No: RVNL/S&T/BPL/INDB-BNI/Pkg – 1D (Indoor) Revised Date : 03/02/2026

Bill of Quantities

PREAMBLE

1. In the Bill of Quantities, quantity and unit rates and thereby the amount against each item have been indicated. From this, the estimated price of each bill has been worked out and indicated in the summary sheet in BOQ. The Bidder shall quote rates as percentage above/below/at par for each schedule in the summary sheet.

2. General directions and descriptions of work and materials are not necessarily repeated or detailed in the Bill of Quantities. References to the relevant specifications and sections of the contract documentation should be made before quoting rates in the Bill of Quantities

3. Storage of Material: All the material at site will have to be properly stacked & stored so as to facilitate inspection. The material should be properly protected from the detrimental effects of nature and fire, theft etc. The contractor shall be responsible for watch & ward and any loss or deterioration on account of above shall lead to rejection of material and contractor has to replace the same at his own cost.

4. The method of measurement of completed work for payment shall be in accordance with provisions in Works Requirements (Specifications) except as otherwise specifically provided in the description of item or particular bill of quantities or explanatory notes to the particular bill of quantities.

5. NOTES SPECIFIC TO EACH BILL OF QUANTITIES.

6. Bill No.11: (Signal & Telecommunication Works)

	General Instructions:
i) a	The bill of quantities (BOQ) shall be read in conjunction with the instruction to bidders, General conditions of contract, particular conditions of contract, work requirements, Technical specification, Explanatory notes, Payment conditions, pre bid clarification and Addenda and Corrigenda if any.
i) b	The quantities given in the Bill of Quantities are estimated and provisional and are given to provide a common basis for bidding. The basis of payment will be the actual quantities of work ordered and carried out including spares to be handed over to railway, as measured by the contractor and verified by the engineer and valued at the rates and prices tendered in the priced Bill of Quantities, where applicable, and otherwise at such rates and prices as the engineer may fix within the terms of the Contract. If any quantities which have been supplied by the contractor and paid by RVNL are determined to be surplus by the Engineer (Except those quantities which become surplus due to change in planning/scheme by Railway/RVNL) during the progress of the work or at the completion of the work, shall be taken back by the contractor, and the payment made by such materials shall be recovered from the pending claims. The material which has become surplus due to change in Planning/scheme by Railways/RVNL and are still in usable condition shall be taken over by RVNL and any part payment still to be made shall be released to the contractor.

<table>
<tr><td>ii)</td><td>
<table>
<tr><td colspan="2">BOQ has been divided in 4 groups i.e.,</td></tr>
<tr><td>Group A Items starting with Series 36 & NS</td><td>Contains items on which PVC is to be paid as per RBI indices.</td></tr>
<tr><td>Group B Items starting with Series 37 & NS</td><td>Contains items on which PVC is to be paid as per IEEMA Formula as contained in GCC.</td></tr>
<tr><td>Group C Items starting with Series 38, 40 & NS</td><td>Contains SUPPLY items on which PVC is to be paid as per RBI indices</td></tr>
<tr><td>Group D Items starting with Series 39, 40 & NS</td><td>Contains EXECUTION items on which PVC is to be paid as per RBI indices</td></tr>
</table>
</td></tr>
<tr><td>iii)</td><td>Arrangement for water supply for execution of different items of works will be made by the contractor at his/their own cost.</td></tr>
<tr><td>iv)</td><td>The unit prices for “Supply items” in the bills is the all-inclusive price of material and all incidental charges for transport, loading/unloading and handling. The prices also include taxes, duties, levies (including octroi) applicable on works contract, insurance/bank guarantee/indemnity bond charges etc. The prices also include provision for losses and wastages in transit and erection. The price quoted also include RITES/RDSO or other agencies inspection and testing charges unless otherwise specified in the bill of quantities or technical and testing charges unless otherwise specified in the bill of quantities or technical specification. In case of change of inspection from RDSO/RITES to RVNL/Consignee, 1% of cost of material to be deducted by RVNL, as
inspection charges.</td></tr>
<tr><td>v)</td><td>The unit price for “Erection items” in the bills are inclusive of the cost of erection and testing and also include all cost of administration of the contract, insurance, premia, banker’s charges, cost of stamps/storage/loading/ unloading and handling of material and also include the cost of transportation which the contractor may incur for carriage of material to the site of works. The unit prices also include cost of works and adjustments that may become necessary during or after the commissioning test.</td></tr>
<tr><td>(vi)</td><td>All invoices for S&T work shall be accompanied with the following, for the purpose of arranging payment against supply of items:
i. Supplier’s Delivery challan.
ii. Inspection certificate granted by the authorized approved agencies/purchaser’s representative as per contract.
iii. Certificate of receipt of material at contractor’s depot/s duly accepted by the Engineer.
iv. Comprehensive insurance policy for supply and safe custody of material
v. Quality assurance document like Manufacture/Supplier warranty certificate.
vi. Indemnity Bond for any loss, theft, damage, or deterioration of material for entire cost of material supply.</td></tr>
</table>

(vii)A	a) 90% of the accepted cost of material supplied in case of supply item will be paid on receipt of the material duly inspected by the inspecting authority. b) Balance 5% of the accepted cost of material for which installation is to be done by the contractor will be paid after the installation and testing. c) Balance 5% of the accepted cost of material for which installation is to be done by the contractor will be paid after the commissioning of the work station/IBH/gate wise portion opened for traffic. Note: Cables shall be measured in length for the types used in the works and the 2nd stage payment for these cables shall be as per actual length measured after laying. The unused cut-pieces generated during laying shall not be measured and the cost of such cut-pieces shall be deemed to be included in the rates. It is clarified that cut-pieces shall be the property of the contractor and the payment made for such cut-pieces shall be recovered from the pending claims.
(vii)B	a) *80% of item rate with the supply and installation description for which installation is to be done by the contractor will be paid on receipt of the material duly inspected by the inspecting authority.* b) *Balance 10% of the accepted cost of material for which installation is to be done by the contractor will be paid after the installation and testing.* c) *Balance 10% of the accepted cost of material for which installation is to be done by the contractor will be paid after the commissioning of the work station/IBH/gate wise portion opened for traffic*
(viii)	100% will be paid for spares, tool kit etc on receipt of equipment, duly inspected by inspecting agency and Engineer.
(ix)	(a) For the items of designing 80% of the accepted cost on commissioning along with approved drawings of the station/IBH/gate wise portion opened for traffic and balance 20% on final acceptance of completion document. (b) For the items of installation/ erection, 70% payment will be made after installation/ erection and balance 30% on completion of the activity acceptable to the RVNL.
(x)	For Electronic Interlocking- Payment for supply items will be as under: a) On supply of Hardware duly inspected by the inspecting authority- 70% Note: EI hardware will consist of all types of cards, card file, EI Rack, object controller and Power supply arrangement for EI. b) On supply of all types of relays required for EI duly inspected by the inspecting authority- 10%. c) On loading of software and completion of simulation test with reference to selection/locking table by RVNL and Railway- 10% d) On commissioning of station and supply of spares – 10%.

(xi)	Before placing the supply order for EI, IPS, DG sets, Solar Panel & Axle counter specific approval of RVNL to be obtained. The same is required to maintain uniformity in signaling in the section. Bidder has to maintain uniformity of make of signaling equipment.
(xii)	**FINAL SETTLEMENT** On expiry of the defect liability period and issue of taking over certificate of the entire installations, the performance security will be refunded or Bank guarantee release to the contractor after adjustment of any dues payable by the contractor.
(xiii)	**RECOVERIES FROM THE CONTRACTOR** All the recoveries for materials supplied and services rendered by the employer to the contractor and other refunds due from the contractor shall ordinarily be made by deductions from the payments due to the contractor covering the value of supply and erection in the progress payment for erection and from payments on provisional acceptance.

7. These above changes in Payment Condition of item No. (vii)A to (x) of Preamble will be applicable to existing contracts, if the contractor agrees and signs supplementary agreement.

Design, Supply, Installation, testing & commissioning of Indoor Signal and Telecommunication work from Mangliyagaon (Incl.) to Budni (Incl.) Section with provision of Electronic Interlocking in 14 stations viz Pannod, Semaliyachau, Chapda, Kheri, Hathnora, Deoli, Kannod, Khategaon, Pipaliya Nankar, Bapcha, Nasrullahganj, Salkanpur, Balkhera, Budni and alteration in existing interlocking system at Mangliyagaon station in connection with New Single Broad Guage Rail Line Between Indore to Budni in the state of Madhya Pradesh, India

Item No.	Description of Item	Unit	Qty	Rate	Amount
GROUP - A	**SUPPLY (EI & AXLE COUNTER)**				
36001(a)	Supply of Electronic Interlocking excluding Panel Processor (Hot Standby) for stations with Signaling functions up to 125 units as per Function table enclosed along with 5% spares, tools, manuals and Instruments.	Set	14	84,79,266.38	11,87,09,729.32
36002	Incremental rate for signaling functions in EI SYSTEM over and above 125 functions under item 36001 above.	Per function	800	77,135.25	6,17,08,200.00
36003	Supply of portable work station to run along with EI configuration tools, data inputs, simulation and functional testing, diagnostics and trouble shooting and commissioning of EI system.	Nos	5	1,58,442.35	7,92,211.75
36004	Supply of 24x7 type operation VDU professional grade of standard make for operator with the following specification: 1) Monitor size - 55" Widescreen (138.8 cm diagonal), 2) LED: Back lit LED 3) Built in speakers	Nos	28	4,12,734.72	1,15,56,572.16
36005	Supply of Industrial grade embedded PC for operator VDU as per RDSO TAN No. STS/TAN/3007 Version 1.0 or latest with adequate storage memory to work in Hot Standby mode	Nos	28	4,92,344.21	1,37,85,637.88
	AXLE COUNTER - SUPPLY				
New NS Item (a)	Supply of High frequency Digital Axle Counter Multi section type complete system including central evaluator(s), final track clearance relay for each track section, Reset boxes, LV boxes, detection points, mushroom houjsing for track side electronics and all other accessories fully wired to the ultimate capacity and fully equipped to the configuration specified as per RDSO's specification No. RDSO/SPN/176/2013 (ver.3) or latest and OEM specification.	Per DP	400	2,90,637.92	11,62,55,168.00
36105	AXLE COUNTER TOOL KIT	Nos.	14	2,50,306.84	35,04,295.76
36106	Supply of Web detector (each set consists of 2 nos. of TX and 2 nos. of RX coils) for Analog/Digital axle counters	Set	20	67,433.14	13,48,662.80
36107	Supply of High Availability Single section Digital Axle Counter System complete with dual sensor as per RDSO specification No. RDSO/SPN/177/2012 with version 3 or latest complete in all respect. Including reset box. It shall have dual sensors	Set	2	11,30,845.78	22,61,691.56
	Total Group A				**32,99,22,169.23**
GROUP - C	**SUPPLY**				
38301	Supply of design set for circuit	Set	5	1,10,744.77	5,53,723.85
	INDOOR SIGNALING WORK-RELAYS - METAL to METAL				

38352	Supply of Point Group RRI, Siemens type (No. RSSK 3515/19)	Each	4	90,894.04	3,63,576.16
38354	Supply of Route Group Siemens type (No. RSSK 31/0002)	Each	4	52,993.91	2,11,975.64
38355	Supply of Signal Group, 3 Aspect Siemens type (No. RSSK 3525/46)	Each	4	59,764.24	2,39,056.96
38356	Supply of Signal Group, 2 Aspect Siemens type (No. RSSK 3525/2)	Each	2	49,192.45	98,384.90
38357	Supply of Shunt Signal Group Siemens type (No. RSSK 3526/67)	Each	2	59,383.50	1,18,767.00
38358	Supply of Non AC Immunised K-50 Relay Siemens type (No. RSSK 30/0011) with contact configuration 4F/4B, 5F/3B, 6F/2B as per RDSO spn. IRS-S-46.	Each	65	5,602.79	3,64,181.35
38363	Supply of Key Lock Relay with different ward combinations Siemens type.	Nos.	120	7,020.95	8,42,514.00
	RELAYS - METAL to CARBON				
38409	Supply of electronic time delay device	Nos.	20	3,436.37	68,727.40
	Fire Alarm System				
NS-1	Supply & Installation of Automatic Fire Detection and Alarm System for Signalling installations (AFDAS) as per RDSO/SPN/217/2021 Ver.3.0 or latest as per Annexure-'A' attached.	Nos	16	12,29,981.74	1,96,79,707.84
38453	Supply of Main Cable Termination rack complete along with patching cable of 24 core or 16/02 sq.mm. as per requirement and as per practice of Railway.	Rack	32	57,538.79	18,41,241.28
38456	Supply of Prewired crank handle cum key lock relay box	Box	18	8,950.00	1,61,100.00
	DATA LOGGER				
38502	Supply of Networked Data Logger to monitor 512 digital and 32 analog inputs.	No	10	4,96,219.99	49,62,199.90
38503	Supply of Networked Data Logger to monitor 1536 digital and 64 analog inputs	No	6	11,06,005.42	66,36,032.52
	BLOCK INSTRUMENT				
38553	Supply of UFSBI (2 nos. as per RDSO/SPN/147/2005 or latest RDSO specification), SM's Panel for single line (2 nos as per RDSO/S/32019 or latest RDSO specification), block telephone & Relay Rack completely wired fully with all relays required for Block working with Axle Counter in RE area	Set	14	9,57,515.96	1,34,05,223.44
	POWER SUPPLY				
38601	Supply of Integrated Power (IPS) SMPS based with battery set of 300 AH, hydrometer etc suitable for EI/PI/RRI.	Set	16	13,44,506.94	2,15,12,111.04
NS-2	Supply of Fuse Block made of PBT as per IRS:S-75/2006 Rev. 2 and Drg. No. SA-23748 (Alt.4) suiatable for Non deterioration fuses.	Nos	1900	76.52	1,45,388.00
NS-3	Supply of Non detoration type fuses as per IRS-S-78/92 to suit the bases supplied 2/4/6/10A capacity as per requirement.	Nos	1900	50.03	95,057.00

NS-4	Design, fabrication, and supply of Fuse Alarm System for monitoring health of various type of fuses with automatic changeover facility along with audio and visual indications as per RDSO specification No. RDSO/SPN/209/2012 Rev. 1.0 to work on 60 Volt DC in both Type-I & Type-II System. Number of fuses with their respective voltage/current and Type I/II shall decided by Engineer Incharge. Each module of fuse alarm system should be compatible to be mounted on the existing relay racks without any alteration. Module should be compact incorporating all the features as mentioned in the specification.	Set	16	17,657.79	2,82,524.64
	MISCELLANEOUS ITEMS				
38901	Supply of Office furniture set for relay room consisting of chairs, office table, Airy revolving & tilting cushion chair, steel almirah, steel stool of Godrej make	Nos.	15	70,127.59	10,51,913.85
38902	Supply of Electronic magneto telephone desk type	Nos.	30	3,809.89	1,14,296.70
NS-5	Supply of 3 x 25 mm copper tape	Mtrs.	1200	631.80	7,58,160.00
NS-6	Supply and installation of Simple Fraklin Rod (Copper) of 3 meter height made of copper including supply of fixing material. The down conductor cable will be provided for fixing.	Nos	16	11,450.40	1,83,206.40
	Total Group C				**7,36,89,069.87**
GROUP - D	**EXECUTION**				
39001	Installation, Wiring, testing, Soldering of all EI equipment, earthing of EI Equipment, Relay Racks and Power Equipment etc. including supply power cable and Documents/Manuals etc.	EI	14	8,03,413.75	1,12,47,792.50
39002	Training (at site and/or work) of Engineers/Officers	Man Weeks	15	29,166.21	4,37,493.15
39003	Commissioning of Electronic Interlocking system	EI	14	31,207.04	4,36,898.56
	AXLE COUNTER - EXECUTION			0.00	0.00
39101	Installation, wiring, testing & commissioning of NEW axle counter system. Outdoor work & Indoor work	Set	14	1,52,295.80	21,32,141.20
39310	Design and drawing for complete indoor signalling work for modifications in existing RRI station as per approved SIP.	Per Route	32	9,589.39	3,06,860.48
	INDOOR SIGNALLING WORK				
39463	**Complete Indoor work of installation, wiring and commissioning for modifications in existing RRI STATIONS as per SIP.**	Per Route	32	13,823.18	4,42,341.76
39452	Erection, Installation of cable termination rack assembly and termination of cables	Rack	32	9,870.80	3,15,865.60
	DATA LOGGER			0.00	0.00
39502	Installation ,wiring,testing and commissioning of dataloggers at station / centralised system at control office	Set	16	31,379.44	5,02,071.04
	BLOCK INSTRUMENT			0.00	0.00
39551	Installation, wiring & testing of Single Line/ Double Line block instruments.	Set	14	12,028.26	1,68,395.64
	POWER SUPPLY				

39601	Installation, wiring, testing and commissioning of complete Integrated Power Supply (IPS) systems including charging of batteries, supply of battery wire, fabrication and fixing of fuse/termination board etc.	Set	16	2,74,747.23	43,95,955.68
	OUTDOOR EXECUTION WORK				
	MISCELLANEOUS ITEMS				
39901	Supply and Installation of MAINTENANCE FREE EARHING AND BONDING SYSTEM as per RDSO specfification	Nos	400	58,479.46	2,33,91,784.00
NS-32	Installation of 3 x 25 copper tape	Mtrs	1200	166.40	1,99,680.00
NS-33	Supply and fixing of Rubber mat 10 mm thick of size 1000 mm x 2000 mm	Nos	17	3,124.80	53,121.60
	SIGNALLING ITEMS				
40801	Supply and Installation of ELD as per RDSO/SPN/256/2002 or latest RDSO specification (12 Channel)	Nos	32	1,99,570.94	63,86,270.08
NS-34	Modification in existing EI system as per latest TAN, it includes:- Design and modification in existing interface and interlocking circuit of EI system, including modification in VDU,CCIP, MT, Data logger, EI, Relay rack complete wiring conforming to RDSO specification, as per technical requirement & tentaive approved signalling plan/diagrams.Required hardware will be provided by railways except the wiring, material (i.e. connectors, interconnecting cable/wires, fuses etc.) The work includes supply of modified ST/LT, interface and logic circuit, CCIP/VDU diagram etc. to suit the approved interlocking p[lan. It also includes modification in data logger/MT, carrying out FAT, SAT jointly with railways and satisfactory commissioning of the modified EI with full complements as per approved IP and western railway practices. All plans and wiring diagrams shall be prepared on AUTOCAD and supplied in both soft copy and hard copies (6 sets.)				
(i)	Alteration involving modification in more than 11 and upto 20 routes.(Rates as per item no.1 of LOA No 10629660100390 dated 08.04.2024)	Per alterati on	1	2656348.30	26,56,348.30
	TOTAL GROUP 'D'				**5,30,73,019.59**
	Total Group A				**32,99,22,169.23**
	Total Group C				**7,36,89,069.87**
	TOTAL GROUP 'D'				**5,30,73,019.59**
	GRAND TOTA L(GROUP A+GROUP C+GROUP D)				**45,66,84,258.69**

	EXPLANATORY NOTES	
Item. No	**Explanatory Notes**	**INSPECTION AGENCY**
	GENERAL INSTRUCTIONS: 1) Current RDSO specifications are mentioned here. However, while procuring only the LATEST RDSO SPECIFICATION will prevail and material to be inspected as per latest RDSO specifications.	
	2) Drawing number mentioned here are current and may be updated. Latest drawings is required to be followed while execution of work.	
	3) The quantities of subitems against each item are to be calculated/assessed and approval of Engineer to be taken before consolidated procurement of such items and for arranging inspection by RDSO/RITES, as the case may be as indicated under Inspection Agency.	
	4) The items of BOQ with total accepted cost of more than Rs. 5.0 Lakhs, (other than mandatory items mentioned in vendor list of RDSO) and as per IRS/SPN/TC/IS/TEC specification to be inspected by RDSO/RITES. Remaining other material by Engineer.	
	5) The items of BOQ (other than mandatory items mentioned in vendor list of RDSO) with total accepted cost upto Rs 5.0 Lakhs are to be inspected by Engineer instead of RDSO/RITES as per prevailing instructions of Railway Board.	
	6) Test and measuring equipments, Electronic exchanges/Intercom, Autotelephones and spare parts of all telecom equipments are not inspected by RDSO.	
	ELECTRONIC INTERLOCKING WORK - SUPPLY	
36001(a)	This includes supply of :	
(i)	Supply of Electronic Interlocking (EI) Hot Standby System *(Stations upto 200 Routes)* - complete as per technical specification of Contract suitable for use in 25KV RE area and generally conforming to RDSO Specifications No. RDSO/SPN/192/2019, Ver. 2.0 or latest and RDSO/Railway Board recommendations, The architecture of EI i.e Centralized or Distributed shall be as per requirement of Zonal Railway. (In case of EI to be used in distributed mode- the architecture and distribution of EI shall be as per RDSO TAN No. STS/E/TAN/3012 dated 28.08.2014 or latest) (upto date of opening of tender); mainly consisting (but not limited to) of	Material as per IRS specn to be inspected by RDSO.(Like EI, Relays, Tagblock, Wires, data logger etc.) remaining other material by Engineer.
	a) Microprocessor Equipment (Having Hot standby system provided with facility of automatic changeover) CPU Connectivity shall be as per latest technical recommendations of RDSO (up to date of opening of tender).	
	b) Interface equipment/Relays, 110V AC to be used for LED signal lighting	
	c) Optical interface	
	d) Point Operation Relays/ Point Group Contactor Relay as per practice of Railway .	
	e) LED Lamp Proving Realys	
	f) Signal & Point Fuses, Tagblocks with cover	
	g) Interconnecting indoor cables	
	h) Wiring Materials	
	i) Maintenance Terminal (Industrial grade embedded fan less PC as per Clause 5.1.5 & 7.2 of RDSO specification and latest RDSO Technical advisory Note for online logging, & provision to be made for two additional spare ports. VDU will be of 24X7 operation professional grade type SIZE 42" . No separate payment will be made for this VDU & PC	

	j) Protocol converter for data transfer to central monitoring unit through data logger .	
	k) Inbuilt power supply equipment and busbar	
	l) Relay racks, fixtures, mounting arrangements, Ladder, runway and accessories	
	m) Protective devices like fuses, lightening and surge protectors etc. as per requirement and recommended by manufacturer and RDSO	
	n) Interconnecting copper/optical cable along with interface to make connections between EI and CCIP with Panel Processor/VDU as per RDSO Cl. 5.1.4	
	o) Termination of functions up to cable termination rack.	
	p) Remaining other relays, wiring material etc., if any.	
	q) Track repeater relay QSPA1, OPERATOR VDU and CCIP shall be paid separately under separate supply item. Configuration of the system to be supplied by the tenderer shall be got approved from RVNL before placing the order.	
	r) IMPORTANT NOTE: Description of various modules, sub assembly and other accessories required for the above work with unit rate to be furnished by EI manufacturer/contractor.s) Compliance of RDSO Specification: Information to be furnished by purchaser1. Clause 5.1.4:Station Master is to be provided with either CCIP and one operating VDU or DUAL VDU as per the zonal Railway requirement.. However SM room and equipment room may be situated in two different building and therefore may be required to be provided with augmented surge protection/Optical interface by EI Manufacturer.2. System output required to drive field gears - Relay interface3. **The manufacturer shall advise complete list of items in a set required for EI system before placing demand for RDSO call letter. Quantity and total cost should be submitted by the EI Manufacturer/Contractor by attaching as annexure.**	
b	Supply of essential spares to the extent of 5% subject to minimum of one, for the cards/modules/PCB, fuses, all relays, lightening arrestors, isolators, convertors etc used in the complete EI system. In addition spare to the extent of 5% subject to minimum of one for all type of interface relays with bases used in EI. Item-wise details of spares to be supplied with unit rates should be listed out by the tenderers in separate annexure.**NOTE: For calculating spares of station total items installed under item No. 36001(a) & 36001 (b)and 36002 must be taken into account.**	Material as per IRS specn to be inspected by RDSO.(Like EI, Relays, Tagblock, Wires, data logger etc.) remaining other material by Engineer.
c	Supply of Tools and Instruments - Tool Kits and Measuring Instruments for technicians/Junior Engineers for testing & maintenance and repair at site and trouble shooting of hardware & software for EI systems as per manufacturer's recommendations. List of instruments & tool kits to be provided by the supplier along with number and unit prices.	
36002	Payment under this item will be made for Electronic Interlocking supplied against item no 36001 by calculating the functions controlled by EI as per Function Table enclosed with the Bid document. Functions up to 125 is covered under item no 36001. For each additional function beyond 125, payment will be made against this item. Typical value of each function is indicated in the enclosed table and based on the actual number of functions controlled by the EI, the total value of functions can be calculated.	
36003	Supply of portable work station to run along with EI configuration tools, data inputs, simulation and functional testing, diagnostics and trouble shooting and commissioning of EI system. Note: Work station should be capable of reconfiguring the system in case of any alterations in the Yard or Interlocking in future. Minimum Hardware Configuration should be Intel i5 processor with 8 GB RAM, 500 GB Hard Disk and 15 inch LCD or LED Display or better of standard make such as Dell/ HP/ Lenonvo with required softwares as mentioned above and compatible ports to connect with EI.	ENGINEER

36004	Supply of 24x7 type operation VDU professional grade of standard make for operator with the following specification: 1) Monitor size - 55" Widescreen (138.8 cm diagonal), 2) LED: Back lit LED 3) Built in speakers.	ENGINEER
36005	Supply of Industrial grade embedded PC for operator VDU as per RDSO TAN No. STS/TAN/3007 Version 1.0 or latest with adequate storage memory to work in Hot Standby mode.	ENGINEER
	AXLE COUNTER WORK - SUPPLY	
New NS Item (a)	Supply of High frequency Digital Axle Counter Multi section type complete system including central evaluator(s), final track clearance relay for each track section, Reset boxes, LV boxes, detection points, mushroom housing for track side electronics and all other accessories fully wired to the ultimate capacity and fully equipped to the configuration specified as per RDSO's specification No. RDSO/SPN/176/2013 (ver.3) or latest and OEM specification. The equipment must also include (i) Microcontroller/event logger card with required software (ii) Surge protection device (iii) Installation material- reduction plates, deflectors, mounting frames for evaluation computers, counting head housing, lightening protection modules with accessories, earthing bolt for counting head. The manufacturer shall advise complete list of items in a set required for this system before placing demand for RDSO call letter.	RDSO
36105	Supply of AXLE COUNTER TOOL KIT: Required tools for tool kit must be recommended by the manufacturer. Purpose of toolkit is to test, diagnose and calibrate the axle counter. However Tool kit for axle counter must consist minimum of (1)True RMS digital multimeter of Fluke make with probe set - 1 no. (2)Extended wired socket to interface with diagnostic plug - 1no. (3) Adjustable torque wrench with inserts (4) Double ended spanner (5) Dummy wheel - 1 nos (6) Screw driver set (7) Carrying case.	ENGINEER
36106	Supply of Web detector (each set consists of 2 nos. of TX and 2 nos. of RX coils) for Analog/Digital axle counters with complete components per detection points. NOTE: This item is required to shift the existing axle counters installed at stations from its present location to new location, thus existing make, type etc is to be checked before placing orders.	ENGINEER
36107	Supply of High Availability Single section Digital Axle Counter System complete with dual sensor as per RDSO specification No. RDSO/SPN/177/2012 with version 3 or latest complete in all respect. Including reset box. It shall have dual sensors.	RDSO
	DESIGN & DRAWING WORK - SUPPLY	
38301	Supply of design set for circuit consist of desktop PC, minimum intel i5 with min 8 GB RAM, 500 GB Hardisk, DVD writer, keyboard, optical mouse 21" LCD Monitor of HP/DELL/Compaq/Lenovo make with printer A3 Size of HP/EPSON/Canon make.	ENGINEER
	RELAYS - METAL TO METAL - SUPPLY	
38363	Supply of Key Lock Relay with different ward combinations (one extra set of ward plate for Point Machine to be supplied with each relay). Siemens type or equivalent.	ENGINEER
38352	Supply of Relay Point Group (A.C immunised) RRI, Siemens type (No. RSSK 3515/19) or similar as per RDSO spn.IRS-S-46 or latest RDSO Specification.	RDSO
38354	Supply of Relay Route Group, Siemens type (No. RSSK 31/0002) or similar as per RDSO spn.IRS-S-46 or latest RDSO Specification.	RDSO
38355	Supply of Relay LED Signal Group, 3 Aspect Siemens type No. RSSK 3525/46 (A-RT-RG-A067) or similar as per RDSO spn.IRS-S-46 or latest RDSO Specification.	RDSO
38356	Supply of Relay LED Signal Group, 2 Aspect Siemens type No. RSSK 3525/2 (A-RT-RG-A066) or similar as per RDSO spn.IRS-S-46 or latest RDSO Specification.	RDSO
38357	Supply of Relay LED Shunt Signal Group Siemens type No. RSSK 3526/67 (A-RT-RG-A065) or similar as per RDSO spn.IRS-S-46 or latest RDSO Specification.	RDSO
38358	Supply of DC Neutral line Relays (Non AC Immunised) Mini Groups of 2 Nos. K-50 Relays Siemens type (No. RSSK 30/0011) with contact configuration 4F/4B, 5F/3B, 6F/2B or similar conforming to RDSO spn.IRS-S-46 or latest RDSO Specification.	RDSO

	RELAYS - METAL TO CARBON - SUPPLY	
38409	Supply of Timer Relay Fail safe type of electronic time delay device - Operated on 60 Volt DC/24 Volt DC for Rly. Signaling as per Spec. No. IRS:S-61/2000 or latest RDSO specification. with a time setting of 120 seconds	RDSO
	Fire Alarm System	
NS-1	Supply & Installation of Automatic Fire Detection and Alarm System for Signalling installations (AFDAS) as per RDSO/SPN/217/2021 Ver.3.0 or latest as per Annexure-'E' attached.	RDSO
	PANEL, RACK & FUSES WORK - SUPPLY	
38453	This includes supply of:	
a	Main Cable Termination rack as per Drg No RVNL/S&T/SG-076/2012 or as per extent Railway practice, complete with scaffolding, fixtures and accessories including mounting arrangement (10 mm thick Hylam or any other suitable arragement) for fixing eight way terminal blocks/ARA/ Modular terminals, along with supply of ladder, string rods, frame,base assembly, insulators, J bolt, nut/bolts & fasteners etc. & as per extent practice on Railway	ENGINEER
b	Supply of PVC indoor cable 1 x 24 x 1 mm dia. PVC Insulated Multi Core unsheathed with plain annealed copper conductor as per IRS:S-76/89 Amndt - 3 Colour coding of insulation of inner core shall be in six colours viz. Blue, Red, Gray, Green, Brown and Black or 16/02 sq. mm. as per practice of Railway - in Quantity as per requirement for patching between Old and New CT Tack	RDSO
38456	Supply of Prewired crank handle cum key lock relay box along with LED, push button, terminal strip etc as per drg no.RVNL/S&T/SK/FIELD/11 suitable for 6 crank handle relay per box. Any additional items required to be provided by the contractor, as per extant practice in the railway.	ENGINEER
	DATALOGGER-SUPPLY	
38502	This includes	
a	Supply of Networked Data Logger for monitoring status of important relays, complete with processor module to monitor 512 digital and 32 analog inputs as per spec. IRS:S-99/2006 or latest RDSO specification including CMU, power supply of adequate capacity, battery, modems and fault diagonostic software for failure analysis, President rack of suitable size. It should have port for E1 CONNECTIVITY for sending DATA to control office .	RDSO
b	Supply of one no. composite computer-printer table,UPS and Printer and one no operator chair.	RDSO
c	In case of EI installation, this datalogger is for logging events outside of EI and full digital input must be supplied. Interface connection with EI is part of EI. The datalogger will transfer its own data along with EI data to central monitoring unit by using E1connectivity.	RDSO
d	Supply of Interconnecting cable between Contacts and Datalogger - this can be either 60/40 indoor cable or jumper wires as per IRS:S-76/89 or latest RDSO specification as per requirement	RDSO
e	Supply of Interconnecting cable between CMU and Datalogger.	RDSO
38503	This includes	
a	Supply of Networked Data Logger for monitoring status of important relays, complete with processor module to monitor 1536 digital and 64 analog inputs as per spec. IRS:S-99/2006 or latest RDSO specification including CMU, power supply of adequate capacity, battery, modems and fault diagonostic software for failure analysis, President rack of suitable size.It should have port for E1 CONNECTIVITY for sending DATA to control office .	RDSO
b	Supply of one no. composite computer-printer table,UPS and Printer and one no operator chair.	RDSO

c	In case of EI installation, this datalogger is for logging events outside of EI and full digital input must be supplied. Interface connection with EI is part of EI. The datalogger will transfer its own data along with EI data to central monitoring unit by using E1 connectivity.	RDSO
d	Supply of Interconnecting cable between Contacts and Datalogger - this can be either 60/40 indoor cable or jumper wires as per IRS:S-76/89 or latest RDSO specification as per requirement	RDSO
e	Supply of Interconnecting cable between CMU and Datalogger.	RDSO
38553	Supply of UFSBI (2 nos. as per RDSO/SPN/147/2005 or latest RDSO specification), SM's Panel for single line (2 nos as per RDSO/S/32019 or latest RDSO specification), block telephone & Relay Rack with due locking & sealing arrangement completely wired fully with all relays required for Block working with Axle Counter & suitable for RE area as per RDSO Specn. No. RDSO/SPN/188/2004 or latest RDSO specification.	RDSO
	INTEGERATED POWER SUPPLY - SUPPLY	
38601	Supply of Integrated Power (IPS) SMPS based as per RDSO specn. No. RDSO /SPN/165/2012 verson 3.0 or latest . This shall be suitable for EI/PI in RE Area. It includes supply of 55 no. of low maintenence batteries of 300 AH, 2 volts each to RDSO spn.no.IRS:S-88/2004 verson 1.0 or latest OR VRLA batteries of 300 AH, 2 volts each to RDSO spn.no.IRS:S-93/96(Amdt 1)or latest as per Railway requirement ; with connector and cable and Status Monitoring Panel with additional 5 nos spare batteries, wooden battery stand, hydrometer, RDSO prescribed tool kit and necessary spares. Before supplying the overall rating of the IPS system shall be designed and worked out by the tenderer as per the yard requirements, Indoor load, distance of the gears at the site etc. The design and type of batteries then shall be got approved by the Engineer. The tentative capacity of the IPS including cold stand by items shall be (SMR - 20Amp - 5nos, Inverter - 3.0KVA -3Nos & CVT - 3.0KVA- 1 No,CVT - 1.5KVA- 1 No, TX-signal - 4 nos,TX track circuit - 2 nos, TX ELB - 1 No,DC-DC converter - 55 Nos of various capacities for varous circuits.)	RDSO
NS-2	Supply of Fuse Block made of PBT as per IRS:S-75/2006 Rev. 2 and Drg. No. SA-23748 (Alt.4) suiatable for Non deterioration fuses.	RDSO
NS-3	Supply of Non detoration type fuses as per IRS-S-78/92 to suit the bases supplied 2/4/6/10A capacity as per requirement.	RDSO
NS-4	Design, fabrication, and supply of Fuse Alarm System for monitoring health of various type of fuses with automatic changeover facility along with audio and visual indications as per RDSO specification No. RDSO/SPN/209/2012 Rev. 1.0 to work on 60 Volt DC in both Type-I & Type-II System. Number of fuses with their respective voltage/current and Type I/II shall decided by Engineer Incharge. Each module of fuse alarm system should be compatible to be mounted on the existing relay racks without any alteration. Mudule should be compact incorporating all the features as mentioned in the specification.	RDSO
	MISCELLANEOUS WORK - SUPPLY	
38901	This includes:	
a	Office chairs of model no CH-1007 of Godrej or equivalent model of same make. - 2 no	ENGINEER
b	Office tables of model no T9 of Godrej or equivalent model of same make. with 3 drawers on left hand side & one locker on the right hand side. Olive brown/green with duplicate keys. -1 no	ENGINEER
c	Airy revolving & tilting working cushion chair with arm rests of model no PCH 7002 of Godrej make or equivalent of same make. -1 no	ENGINEER
d	Supply of steel almirah - office storwel of Godrej make or equivalent model of same make. Size 1980 x 915 x 486 approx with 4 shelves making 5 compartments without locker having locking door. -1 no	ENGINEER
e	Steel stool Godrej make or similar ST-2 or equivalent -4 no.	ENGINEER

38902	Supply of Electronic magneto telephone desk type as per specn.No.IRS :TC79/2000or latest RDSO specification.	ENGINEER
NS-5	Supply of 3 x 25 mm copper tape	
NS-6	Supply and installation of Simple Fraklin Rod (Copper) of 3 meter height made of copper including supply of fixing material. The down conductor cable will be provided for fixing.	ENGINEER
	ELECTRONIC INTERLOCKING WORK - EXECUTION	
39001	This includes :	
a	Supply of Documents/Manuals for EI System as per para 10.1 of RDSO Specification No:RDSO/SPN/192/2005 or latest RDSO specification	ENGINEER
b	Earthing of EI Equipment, Relay Racks and Power Equipment etc with bonding ring conductor to be done along with supply of all requisite materials as per EI requirement, RDSO directives and Signal Engineering Practice for lightening protection.	ENGINEER
c	Supply of Flexible Wire Copper multistrand, 16 Sqmm, PVC insulated insulation thickness of 1.5 mm±0.15; conductor resistance not exceeding 1.21 ohms per Km at 20 degree Centigrade; over all core diameter 8.45mm±0.25; conductor diameter: 0.400mm±0.005; Number of conductors:126 and test parameter as per specification no: IRS:S 76/89 Amendt-3 for wiring from IPS room to EI room and power wiring as per site requirement.	RDSO
d	Installation, Wiring, testing, Soldering of all EI equipments with contractor's material including wiring & soldering of panel, relays, Gumties (where ever provided) and bringing the functions up to CT Rack in same room.	ENGINEER
e	Supply of all related consumable materials like rosin core, lacing thread, PVC bunching tape and buttons eyelets of sizes,.etc.	ENGINEER
f	Power wiring of all EI equipments, laying of power cable from IPS room to EI room and to all other associated functions like panel processors, interface relay racks, datalogger, maintenance terminals etc.	ENGINEER
g	Contractor's Testing and organising testing for RVNL/Railway. The testing includes - Functional testing, selection table testing with contractor's simulation panel.	ENGINEER
39002	Training (at site and/or works) is to be organised for two types of modules: Module (1) is for Field Technicians & Engineers & Module (2) is for Engineers and Officers of RVNL/Railway. The training module covers Installation, Commissioning, testing and maintenance and include supply of hard copies of course modules	
39003	Commissioning of Electronic Interlocking system after interfacing of indoor equipments with outdoor gears in association with Railway Personnel during Non Interlock working. Competent Engineer of manufacturer must be available during Pre NI, NI and Post NI.	ENGINEER
	AXLE COUNTER WORK - EXECUTION	
39101	Installation, wiring, testing & commissioning of new Digital axle counter system. Outdoor work includes : Fixing of track transducers on the rails. Drilling of holes in rails. supply and laing of HDPE pipe, Laying of track transducers cable from rail to EJB in HDPE pipe and from EJB to Location box by digging/trenching as per instruction of Site Engineer. Installation of electronic junction box in location box. Termination of cables & wiring of EJB. Indoor work includes: Installation of Evaluator, wiring and termination of quad cable. Laying & termination of cable from C.T.rack to evaluator. Fixing of relays, bus bars & fuses.Installation, wiring, testing & commissioning of reset box & line verification box in SM room / cabin. This includes: Fixing of reset box/line verification box on Wooden/hylam sheet. Supply & fixing of MS angles. RDSO Check list for installation are to be complied by manufacturer's engineer.	ENGINEER
	INDOOR PI/RRI WORK - EXECUTION	
39452	This includes:	

a	Erection & Installation of Cable Termination Rack Assembly complete with wall supports, scaffolding, 8 way/ ARA/Modular terminal, 96 way tag-block and other necessary accessories etc. The work shall be done as per approved plan, extent practice on Rly. and the instructions of Railway Engineer at site.	ENGINEER
b	Termination of cable core in CT rack at 8Way/ARA/Modular terminal. This includes pulling out of cable from under ground, spilling of cable & fixing on the CT rack etc. and submission of cable termination particulars.	ENGINEER
c	Laying of indoor signalling cable on ladder, dressing, and terminating the same on Old and New CT rack, wherever required, to patch the Old Outdoor signalling cable in new installation.	ENGINEER
	DATALOGGER WORK - EXECUTION	
39502	This includes either (a) or (b)	
a	Installation, Wiring ,testing and commissioning of Centralized monitoring of Data loggers at Control Office by linking all Road side dataloggers including conventional and EI Data loggers complete along with accessories with Contractor's own material. This includes programming of data logger for fault diagnostic in suitable structured language in consultation with Rly.	ENGINEER
b	Installation, wiring ,testing and commissioning of Data Logger along with RTU complete along with accessories with Contractor's own material. This includes programming of data logger for fault diagnostic in suitable structured language in consultation with Rly.	ENGINEER
	BLOCK INSTRUMENT WORK-EXECUTION	
39551	Installation, wiring & testing of block instruments (Single line/Double line) along with bell unit, filter, polarised relay and other accessories. The work involves supply of wiring material and wiring right from telecom DP to block instrument and Block instrument to relay room and connection with power supply including fuse wiring. This work may be involved along with releasing of complete existing SL/DL block instrument, relay, bell unit, filter, block counter and its accessory and its transportation to new location for further use.	ENGINEER
	INTEGERATED POWER SUPPLY WORK - EXECUTION	
39601	This includes:	
a	Supply of Flexible Wire Copper multistrand, 25 Sqmm, PVC insulated, insulation thickness of 1.5 mm±0.15; conductor resistance not exceeding 0.780 ohms per Km at 20 degree Centigrade; over all core diameter 10.2 mm±0.25; conductor diameter: 0.40 mm±0.005; Number of conductors:196 and test parameter as per specification no: IRS:S 76/89 Amendt-3. For wiring of IPS and Battery in Red and Black Colour - quantity as per requirement of site and directions by Engineer.	RDSO
b	Supply of all material, Fabrication and fixing of fuse/termination board made out of 10 mm thick Hylam sheet and fixed with FUSE BLOCKS/ ARA TERMINALS/ HIGH CAPACITY MODULAR POWER TERMINALS, laying and termination of power wires from IPS to this board and further extending supply to Relay room and outdoor functions as per instruction of engineer at site.	ENGINEER
c	Supply of Flexible Wire Copper multistrand, 16 Sqmm, PVC insulated insulation thickness of 1.5 mm±0.15; conductor resistance not exceeding 1.21 ohms per Km at 20 degree Centigrade; over all core diameter 8.45mm±0.25; conductor diameter: 0.400mm±0.005; Number of conductors:126 and test parameter as per specification no: IRS:S 76/89 Amendt-3. For wiring from IPS to fuse/termination board in Red&Black colour for DC supply, Gray for AC supply and Green for earth wire - in quantity per requirement of site and direction of Engineer.	RDSO

d	Installation, testing and commissioning of Integrated Power Supply (IPS) systems for stations / LC Gate/ IBH or at any other location. Initial charging of lead acid low maintenance batteries for IPS, Supply of sulphuric acid to approved specification, distilled water. Preparation of electrolyte. Charging & discharging of batteries (3 cycles). Wiring from Auto Change over panel to IPS and from IPS to Fuse/Termination board/Battery Bank/Status Monitoring Panel . Installation testing and commissioning shall be done by manufacturer as per RDSO guide lines/check list. All the prescribed protective equipments shall be installed. Connection to Earth shall be done as per RDSO prescribed standard.	ENGINEER
	MISCELLANEOUS WORK - EXECUTION	
39901	This includes	
a	Supply of MAINTENANCE FREE EARTHING AND BONDING SYSTEM (Two Earth Pit) as per RDSO specification no: RDSO/SPN/197/2008 or latest RDSO specificationconsisting of (a) Earth electrodes made of high tensile low carbon steel circular rods, molecular bonded with copper on outer surface as per RDSO spn - 2 no. (b) RDSO approved Earth Enhancing compound (c) (MEEB) Main equipotential earth busbar of Copper of 300x25x6 mm(Min) and (SEEB) Sub equipotential earth busbar of copper 150x25x6 mm(Min) (d) Multistrand single core PVC insulated copper cable as per IS:694 -(i) of size 10 sqmm to connect individual equipment to SEEB using copper lugs with stainless steel nuts and bolts,(ii)of size 16 sqmm to connect SEEB to MEEB using copper lugs with stainless steel nut and bolts (iii) of size 16sqmm to connect Surge protection devices(SPD) to MEEB using copper lugs with stainless steel nut and bolts (iv) of size 35 sqmm(duplicated) to connect MEEB to main earth electrode (e) Copper tape of size 25x2mm to connect the two earth pits, (f) Earthpits x 150 mm to terminate on earth electrode.	RITES
b	Construction of earthpit and making of earth as per RDSO specification no.RDSO/SPN/197/2008 or latest RDSO specification and drawing no: SDO/RDSO/E&B/001, Equipotential Earth bus bar and its connection to equipments and surge protection devices in the equipment room as per RDSO Drg. no. SDO/RDSO/E&B/002. Provision of Exothermic weld connections, fixtures for mounting the Copper tape in the relay room, weld materials, tools & fixtures for the weld shall be arranged by the contractor.	Engineer
NS-32	Installation of 3 x 25 copper tape.	Engineer
NS-33	Supply and fixing of Rubber mat 10 mm thick of size 1000 mm x 2000 mm.	Engineer
40801	Supply and Installation of ELD as per RDSO/SPN/256/2002 or latest RDSOb specification (12 Channel)	RDSO for material, installation by Engineer
NS- 34	Alteration involving modification in existing electronic interlocking system up to 20 Routes.	Engineer

ANNEXURE - A

TYPICAL FUNCTION TABLE OF EI			
S.No	Description of signaling Gears	EQUIVALENT FUNCTION	RELAYS
1	Signal Two aspect	3	HR, RECR, HECR
2	Signal Three aspect	5	HR, DR, RCR, HECR, DECR
3	Signal Four Aspect	7	HR, HHR, DR, RECR, HECR, HHECR, DECR
4	Junction route indicator - One way	2	UHR, UECR
5	Junction route indicator - Two way	3	HHR1, UHR2, UECR
6	Junction route indicator - Three way	4	UHR1, UHR2, UHR3, UECR
7	Junction route indicator - Four way	5	UHR1, UHR2, UHR3, UHR4, UECR
8	Calling on Signal	2	COHR, COECR
9	Shunt Signal (Dependent)	2	SHHR, SHECR (OFF)
10	Shunt Signal (Independent)	3	SHHR, SHECR (ON), SHECR (OFF)
11	Track Circuit	1	TR
12	Cross over Point (Signal ended/Double ended)	4	NWR, RWR, NWKR, RWKR
13	L.C.Gate - Traffic	2	GZYR, GZPR
14	G.F.Operated Point	4	NWR, RWR, NWKR, RWKR
15	Block Instrument	4	TGT, TCF, LC, SNR
16	Axle Counter (One track section)	1	AZTR
17	Crank Handle	2	CHZYR, CHZPR
18	Slot Outgoing	1	YR
19	Slot Incoming	1	YR
20	A Marker	2	AMGR, AMGECR

NOTE: These are minimum vital input/output functions to achieve circuits in EI. In case typical circuit diagram of zonal railway have more vital inputs/outputs, it can be adopted and paid with the approval of RVNL corporate office after verification from corporate design office. **Non-vital I/O and read back I/O shall not be counted**

Annexure - B

Item No.	Description of item	Unit	Qty
1	Supply of addressable fire alarm panel which consists of display board, 160 character display with touch key pad, mother board which has cortex 32-Bit processer, Inbuilt RS-485 networking circuit for peer to peer networking, Inbuilt USB 2.0 port for upload and download the configuration tools, Two inbuilt programmable relay and 4 Loop card circuits. Power supply Board which will have SMPS fully protected board, which its operates on 120to 220V AC + 10% with 50/60 Hz, battery backup 24V DC with Built-in charger. The Panel have IP-50 rating optional: for BMS integration MODBUS converter, Graphical Software, Software for TCP/IP Module, provision for Auto dialler approved UL listed. (As per RDSO specification no. RDSO/SPN/217/2021 Ver 3.0 or latest amendment).	Nos	14
1.1	Supply of Loop Card which will have 254 devices of both detectors and modules in a single line circuit, SLC supports both class A and class B wiring approval: UL listed (As per RDSO specification No. RDSO/SPN/217/2021 Ver 3.0 or latest amendment)		
2	Supply of Power Supply Unit 24VDC, 5 Amps, (As per RDSO Specification No. RDSO/SPN/217/2021 Ver 3.0 or latest amendment)	Nos	14
3	Supply of addressable single action indoor manual call point with back box (RAD) and also including key. RDSO spec no. RDSO/SPN/217/2021 Ver 3.0 or latest i.e. (Adressable single Supply of Analogue Addressable Manual Pull station with integral short circuit isoltor, Analogue addressable protocol having	Nos	42
4	Supply of Sounder having range of 81 dbA to 92 dbA RDSO spec no. RDSO/SPN/217/2021 Ver 3.0 or latest (Supply of Sounder cum Strobe 24V operated 85dB Sounder output, 75Cd flaher	Mtr	42
5	Control Module/Output Module (Supply of Control module to address Sopunder cum strobe as per RDSO specification No.	Nos	42
6	Control Module/Output Module (Supply of Relay module to connect the Data Logger to the Panel as per RDSO specification	Nos	84
7	Unaromed Fire Survival circuit integrity cable (inside only) i.e. Supply of Fire Survival cable 2C X 1.5 sqmm (Meters) unarmoured, (As per RDSO Specification No.	Mtr	5600

8	Monitor Module/Input Module as per RDSO specification No. RDSO/SPN/217/2021 Ver 3.0 or latest) i.e. supply of Monitor Module to connect the	Nos	14
9	lnsolator Module (inbuilt in panel) i.e. supply of zone interface module to connect ACDS to main FAS panel, (As per RDSO Specification No.	Nos	14
10	Analogue Interface Module Including and Line box (supply of Analogue Controller for LHS cable, RDSO specification No.	Nos	14
11	Supply of Resettable type Analogue LHS cable (As per RDSO Specification No. RDSO/SPN/217/2021 Ver 3.0 or latest.	Mtr	1400
12	Supply of multi sensor detector Dule Optical. As per RDSO Specification No. RDSO/SPN/217/2021 Ver 3.0 or latest. (Addressable Multi detector combination of heat cum smoke, with Binary coded address setting. Dual LED's for 360' visibility. Sleek low-profile housing design. Supply of Fault isolator Base capable of monitoring shorted loop circuit	Nos	224
	Spares		
1	10% mandatory spare as per RDSO Spec. No. RDSO/SPN/217/2021 ver 3.0 or latest	Nos	2