



RAMS CONSULTANCY FOR KOCHI METRO RAIL LIMITED PROJECT

TENDER No. KMRL/RAMS/04/2015

Kochi Metro Rail Limited

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Notice of Invitation to Tender

Tender for RAMS Consultancy for Kochi Metro Rail Projects system is being called by KMRL, from firms having experience of conducting RAMS audit and assessment and operational review of the projects. Copies of the tender documents can be downloaded from KMRL's official website www.kochimetro.org free of cost. The Tender submission should be accompanied by a non-refundable Processing fee of **Rs.25,000 (Rupees Twenty Five Thousand Only)** in the form of Banker's Cheque / Demand Draft, drawn in favour of Kochi Metro Rail Ltd., payable at Kochi, valid for 3 months.

The following tender information should also be noted:

Tender Processing Fee	<p>INR 25,000 or USD 400</p> <p>To be deposited at the time of tender submission in the form of Banker's Cheque/ Demand Draft, drawn in favour of Kochi Metro Rail Ltd., payable at Kochi, valid for 3 months</p>
Tender validity	180 days from the latest date of submission of Tender
Tender Security amount	<p>INR 5,00,000 or equivalent amount in single freely convertible foreign currency as described in (Clause 5) of the Instructions to Tenderers.</p> <p>The validity should be for 180 days + 28 days i.e. For 208 days from the latest date of tender submission.</p>
Completion Period of the Contract (Subject to the achievement of Key Dates)	Refer SCC 4
Download Tender Document	13/05/2015 to 20/05/2015
(From Kochi Metro website)	
Last date of seeking clarification	27/05/2015
Pre-bid Meeting	04/06/2015 at 15:00 Hrs
Date & Time of Submission of Tender	11/06/2015 up to 1500 Hrs
Date & Time of opening of Tender	11/06/2015 at 15:30Hrs
Authority for seeking clarifications both hard and soft copy (on MS-Word format by E- mail)	<p>Dy.General Manager (S&T) Kochi Metro Rail Limited, 8th Floor, Revenue Tower, Park Avenue, Kochi-682011, Kerala, India E-mail address:sajith.v@kmrl.co.in</p>

Fax: +91-484-2380686	
Authority and place of submission of completed Tender Documents	General Manager (S&T) Kochi Metro Rail Limited, 8th Floor, Revenue Tower, Park Avenue, Kochi-682011, Kerala, India
Selection of Consultant	Quality and Cost Based Selection Process (QCBS)

Note:

- i. One set of tender documents along with addenda and corrigenda, if any, shall be submitted with tender submittal duly initialed by the authorized signatory and stamped on each page.
- ii. Please note carefully the requirements for submitting tenders, and the date and time for submittal. Late or delayed tenders will not be accepted.

INSTRUCTIONS TO TENDERER

1. Proposal

1.1. General Description of the Work

Kochi Metro Rail Limited (KMRL) is constructing Kochi-Aluva to Petta Corridor. It is covering a distance of around 25.612 Km. There are 22 stations (all elevated) and Depot at Muttom which is at grade.

The project is being financed through Agence Française de Développement, hereinafter referred to as the AFD will be subject, in all respects, to the terms and conditions of the Loan Agreement, including the disbursement procedures and the 'Guidelines for Procurement under AFD Loans. No party other than KMRL shall derive any rights from the Loan Agreement or have any claim to loan proceeds. The above Loan Agreement will cover only a part of the project cost. The remaining portion shall be financed through equity participation by the Government of India and Government of Kerala and other appropriate means.

The detailed Scope of Services for the Contractor is described in the section "Scope of services".

1.2. KMRL is calling for Lump Sum Tenders for Tender No: **KMRL/RAMS/04/2015.**

1.3. To qualify for Award of Contract, the Tenderer shall submit a written Power of Attorney authorizing the signatories of the Tenderer to commit each member of the partnership, consortium or joint venture.

1.4. Where the Tenderer comprises a partnership, consortium or joint venture, the Tenderer shall complete the following information to continue to meet the minimum threshold criteria :

- (a) Documents evidencing company registration for each company and any joint venture contract, if appropriate
- (b) JV/Consortium agreement duly registered shall be provided;
- (c) Nomination of one of the members of the partnership, consortium or joint venture to be in-charge: and this authorisation shall be covered in the Power of Attorney signed by the legally authorised signatories of all members of consortium or joint venture;
- (d) Details of the intended participation expanded with complete details of the proposed division of responsibilities and corporate relationships among the individual members.
- (e) The joint venture/ consortium agreement must contain a clause stating "All the partners are jointly and severally liable to KMRL." The joint venture agreement, duly registered, should be provided so as to be legally valid and binding on partners/ members of the joint venture.
- (f) The lead partner in charge shall be authorized to incur liabilities, receive payments and receive instructions for and on behalf of any or all partners of the joint venture.

1.5. The Tenderer shall submit with his Tender full details of his ownership and control or, if the Tenderer is a partnership, joint venture or consortium, full details of ownership and control of each member thereof.

- 1.6. Documents provided under Para 1.4 shall be confirmed by an appropriate Chamber of Commerce or other similar organisation. Each power of attorney shall be notarised by a competent authority in the country of the issuing company. Documents provided under para 1.4 (a) and (b) shall be certified with a conformant Apostille if the country of issue has signed the Hague Legislation Convention of 1961. Document provided from countries, which are not signatories to the 1961 convention shall be legalised by a Consular Officer of the country from which the document is issued.
- 1.7. Indian Tenderers, or Indian members of a partnership, joint venture or consortium shall submit, a certified copy of the income tax registration details (PAN/TAN).
- 1.8. Tenderer (each member in the case of a partnership, joint venture or consortium) or any associate is required to confirm and declare with his Tender that no agent, middleman or any intermediary has been, or will be, engaged to provide any services, or any other item or work related to the award and performance of this Contract. They will have to further confirm and declare in the submittal that no agency commission or any payment which may be construed as an agency commission has been, or will be, paid and that the tender price will not include any such amount. If the Employer subsequently finds to the contrary, the Employer reserves the right to declare the Tenderer as non-compliant, and declare any Contract if already awarded to the Tenderer to be null and void.
- 1.9. Canvassing or offer of an advantage or any other inducement by any person with a view to influencing acceptance of a tender will be an offence under laws of India. Such action will result in the rejection of the tender, in addition to other punitive measures.
- 1.10. The Tenderer is required to confirm that they (including all Partners/Members of a Partnership, Consortium or Joint Venture) are not one of the following:
 - i. A firm or an organization which has been engaged by the DMRC or any project Contractor to provide consulting services for procurement or for implementation of this project, either at the design, installation or Commissioning stage.
 - ii. Any association/affiliates (inclusive of parent firm) of a firm or an organization mentioned in subparagraph (i) above.
 - iii. A firm or an organization who lends, or temporarily second its personnel to firms or organizations which have been engaged by the DMRC or any Project Contractor to provide consulting services for procurement for or implementation of this project, either at the design, installation or Commissioning stage, if the personnel would be involved in any capacity for these Services.
- 1.11. The evaluation of the proposal will be rejected if it is determined that the tenderer has engaged in corrupt practices in competing for the contract in question.

1.12. Selection Process

KMRL intends to follow a two stage selection process in evaluating the proposal. In the first stage, a technical evaluation will be carried out as specified in Clause 10.6 and 11 of the Instructions To Tenderer (ITT). Based on this technical evaluation, a list of short listed applicants will be prepared as specified in Clause 11.2 of ITT. In the second stage, a financial evaluation will be carried out as specified in Clause 11.4 of ITT. The proposals will finally be ranked according to their combined technical and financial scores as specified in Clause 11.5 of ITT.

2. Site visit

- 2.1. The Tenderer is advised to visit and examine the Site of works and its surroundings and obtain for himself on his own responsibility all information that may be necessary for preparing the Tender and entering into a contract for the proposed Works. The costs of visiting the Site shall be borne by the Tenderer. It shall be deemed that the tenderer has undertaken a visit to the site of Works and is aware of the site conditions, the existing details and those proposed in KMRL Projects for the purpose of this tender prior to the submission of Tender Documents.
- 2.2. The Tenderer and any of his personnel will be granted permission by the Employer to enter upon his premises and lands for the purpose of such inspection, but only upon the express condition that the Tenderer, and his personnel, shall release and indemnify the Employer and his personnel from and against all liability in respect thereof and shall 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.

3. Conditions of Eligibility of Tenderers

Applicants must read carefully the minimum conditions of eligibility (Appendix I: Form 8 – Minimum Eligibility Criteria) provided herein. Proposals of only those Applicants who satisfy the Conditions of Eligibility will be considered for evaluation.

A subsidiary company, registered/ incorporated in India, for the purpose of meeting the eligibility criteria, may utilise the financial and technical credentials of their parent/holding company having not less than 90% share in the subsidiary company. The technical credentials of subsidiary (ies) in which shareholding of the parent/holding company is not less than 90% shall be treated as the credentials of parent/holding company. This will be subject to submission of an undertaking by the parent company that they will be providing the financial and technical back-up for the completion of this consultancy and also will be wholly responsible for the services proposed to be rendered. Wholly owned subsidiary shall mean that 100% shares are owned by the parent company.

Technical Capacity

The Sole Firm or the Lead Member in case the Applicant is a Consortium, shall have met the following requirements preceding the proposal due date (PDD)

Completed a minimum of one Eligible Assignment (EA) as defined Clause 6.2.5 (v)

Financial Capacity

Sole Firm or Lead Member (in case the Applicant is a Consortium) shall have received a minimum revenue equivalent to INR 500 million per annum from consultancy fees during each of the three financial years as per Form – 6 of Appendix – I. The above is to be evidenced by the certificate of the statutory auditor of the company, in his absence by the certificate of an independent Chartered Accountant in practice.

4. Availability and Eligibility of Key Experts

- 4.1. **Eligibility of Key Experts:** Each of the Key Experts must fulfill the Conditions of Eligibility specified below:

Key Expert	Minimum Educational Qualification	Minimum Length of Professional Experience (years)	Minimum Eligibility Criteria
RAMS Expert	Bachelor's degree in Electrical/ Mechanical Engineering or Master's degree in Electrical Engineering.	15	Should have worked as RAMS expert in at least 2 completed Eligible Assignment [as defined in Clause-6.2.5 (v)]
Operations Expert	Bachelor's degree in Electrical/ Mechanical Engineering or Master's degree in Electrical Engineering.	15	Should have worked as Operations Expert in at least 2 completed Eligible Assignment [as defined in Clause-6.2.5 (v)]

Note: Only those Key Experts who obtain a minimum 70% of the allocated maximum marks for that position will qualify for further evaluation

5. Tender Documents

5.1. Content of Tender Documents

5.1.1. The Tender Invitation Documents, as listed below, have been prepared for the purpose of Inviting a tender for Kochi Metro Rail Projects in connection with Tender No. KMRL/RAMS/04/ 2015 of the Kochi, Aluva to Petta Corridor. In the order of precedence as follows:

- (a) Notice of Invitation to Tender
- (b) Instructions to Tenderer including Annexure
- (c) Terms of Reference
- (d) Appendix with Forms
- (e) Special Conditions of Contract
- (f) General Conditions of Contract

5.1.2. The Tenderer is expected to examine carefully the contents of all the above documents. Failure to comply with the requirements of the tender submittal will be at the Tenderer's own risk.

5.2. The Tenderer shall not make or cause to be made any alteration, erasure or obliteration to the text of the Tender Documents.

5.3. Clarification of Tender Documents

5.3.1. The Tenderer shall check the pages of all documents against page numbers given in indexes and summaries and, in the event of discovery of any discrepancy; the Tenderer shall inform KMRL forthwith.

- 5.3.2. Should the Tenderer for any reason whatsoever, be in doubt about the meaning of anything contained in the Invitation to Tender, Tender documents or the extent of detail in the Employer's Requirements, the Tenderer shall seek clarification from KMRL, **on or before the latest date of seeking clarification given in the Notice of Invitation to Tender**. All communications between the Tenderer and KMRL shall be in writing.
- 5.3.3. Except for any such written clarification by KMRL which is expressly stated to be by way of an addendum to the documents referred to in paragraph 5.1.1 above and/or for any other document issued by the Employer which is similarly described, no written or verbal communication, representation or explanation by any employee of the Employer shall be taken to bind or fetter the Employer under the Contract.

5.4. Amendment of Tender Documents

- 5.4.1. Tenderer is advised that further instructions to Tenderer and addenda to the Tender Documents may be issued during the tender period. These addenda & corrigenda are the part of Tender documents. Therefore Tendered shall confirm receipt of such documents in the Appendix I – Form 11 and list them in the Tender Submittal.
- 5.5. The Tenderer should note that there might be aspects of his Tender and/or the evaluation documents submitted with the Tender that will necessitate discussion and clarification. It is intended that any aspect of the said evaluation documents and any amendments or clarification which are to have contractual effect will be incorporated into the Contract either:
- (a) by way of Special Conditions of Contract to be prepared on behalf of the Employer and agreed in writing by the Tenderer prior to and conditional upon acceptance of the Tender; or
 - (b) by the Tenderer submitting, at the written request of the Employer, documents which are expressly stated to form part of the tender, whether requested before or after submission of the documents forming part of the Tender, identified in paragraph 6.2.2 to 6.2.3 below, and whether as supplements to, or amended versions of such documents.

Save as aforesaid, all such amendments or clarifications shall not have contractual effect.

6. Preparation of Tenders

6.1. Language

Tenders and all accompanying documents shall be in English. In case any accompanying printed literature is in other languages, it shall be accompanied by an English translation. The English version shall prevail in matters of interpretation.

6.2. Documents Comprising the Tender

- 6.2.1. The Tenderer shall, on or before the date given in the Notice of Invitation to Tender, submit his Tender in two separate sealed envelopes clearly marked with the name of the Tenderer and with "Tender No. KMRL/RAMS/04/2015 Technical Package", and "Tender KMRL/RAMS/04/ 2015 Financial Package" This shall be addressed to the Office of the General Manager (Signal & Telecomm) at the address given in the Tender Documents. The Tenderer shall ensure that a receipt is obtained for the submission of his Tender, such receipt being issued free of charge.
- 6.2.2. The original Tender Guarantee shall be submitted in a sealed envelope independent of the sealed tender, at the time of opening the Tenders.

6.2.3. The Tenderer shall submit the following documents duly completed with the Technical Package of his tender submission:

(a) Forms 1 to 16 in Appendix I

6.2.4. The tenderer shall submit the following documents duly completed with the financial package of his tender submission:

(a) Form 17 (A, B, C and D) of Appendix I

(b) Copy of tender guarantee

(c) Income Tax clearance certificate (see paragraph 7.9)

6.2.5. The tenderer shall submit with his technical package the documents that are identified in paragraphs below.

These documents will be used for the purpose of evaluating and analysing the tender but will not form part of the Contract, unless the same shall have been expressly incorporated into the Contract in accordance with paragraph 5.4 above.

- i. Documents amplifying the Tenderer's Technical proposal.
- ii. Any further documents which are requested in writing by Employer before submission of the Tender by way of evaluation documents but which are not to form part of the Contract.
- iii. Documents relating to performance, current contracts, relevant experience.
- iv. The Tenderer will be appropriately certified or accredited by an International Body or by a National Railway to assess KMRL Projects. Certification/Accreditation Details (Certificate/proof to be attached) (details).
- v. The individual or members of the JV/Consortium (could have been a member of some other JV/consortium) collectively should successfully completed a minimum of two projects of RAMS consultancy of a Metro Railway Project of not less than 10 km each, in the last 7 years ending 31st Dec 2014. The project(s) must demonstrate RAMS consultancy of System.
- vi. Documents relating to the financial condition of the Tenderer

6.2.6. Should any further document be required in pursuance to paragraph 6.2.4(b), the Tenderer will be instructed by the employer which package the tenderer's submission is to contain such documents.

6.3. Tender Forms

The tender forms given in Appendix I shall be completed and signed by a duly authorized and empowered representative of the tenderer. If the tenderer comprises a partnership, consortium or a joint venture, the form of tender shall be signed by a duly authorized representative of the JV/Consortium or participants thereof. Copies of relevant powers of attorney shall be attached.

6.4. RAMS Technical Proposal

6.4.1. The RAMS technical proposal shall cover in details the following:

- i. Understanding and comprehension of the work involved, including a discussion on the major challenges involved. The general approach and methodology proposed for carrying

out the services covered in the scope of services, including such detailed information, as deemed relevant.

- ii. A detailed overall RAMS audit and assessment plan on services indicated in the scope of services including any other relevant information and operational philosophy.

In addition, the technical proposal shall contain:

- iii. A detailed overall RAMS audit and assessment programme and a bar chart indicating the duration and timing of assignment of each key expert staff or other staff member assigned to the project.
- iv. An estimate of the total man months required together with the justification for the same.
- v. Proposed organization chart together with clear description of the responsibilities of each key staff member within the overall RAMS audit and Assessment programme and Operational Requirements.
- vi. A task list of deliverables including full description and delivery dates of each, and the person responsible for performing the deliverable.
- vii. The name, background and professional experience of each key expert staff member to be assigned to the project, with particular reference to his experience of a nature similar to that of the proposed assignment (The majority of the key expert staff must have been regular members of the firm for at least 6 months in the last 1 year). Suitable documents from the Metro/Railway authorities shall be submitted about the association of the proposed expert staff or this assignment.
- viii. The details of the name, background and CV of any sub-contracted staff who will be employed on the project.
- ix. The name and addresses of any firm who may be given sub-contracts, if any, or any other work together with details of their experience.
- x. Details of RAMS audit and assessment tasks and Operational tasks, together with their location.
- xi. Previous RAMS audit and assessment and Operational experience as detailed in para 6.2.3 (a). Suitable documents from the Metro/Railway authorities clearly stating which system/sub-system was audited shall be submitted about jobs performed by the RAMS consultant.
- xii. A typical list of proformas to be used to tabulate various parameters related to audit and assessment of similar of the various subsystems/systems.
- xiii. Table of contents of RAMS Audit and assessment and Operational report. The entire scope of services, laid out in this tender is required to be covered.

6.4.2. The JV/Consortium agreement (See clause 1.3 and 1.4)

6.4.3. No information relating to estimated costs or financial terms of the Tenderer's services should be included in the Technical Proposal

- 6.4.4. The tenderer shall submit with his tender his technical proposals as described in 6.4.1 above
- 6.4.5. The tenderer may require amplifying, explaining and developing the technical proposals in substantially greater detail during the tender evaluation period such that they may be confirmed as complying clearly with the Employer's requirements and, in accordance with paragraph 5.5 herein, can be incorporated into the contract. Only those aspects of the contractor's technical proposal that the employer (at his sole discretion) considers clearly conforming will form part of the contract.
- 6.4.6. Notwithstanding paragraph 5.3.2, and subject to paragraph 5.3.3 of the Instructions to Tenderers, the Employer is willing to hold a meeting or meetings with the Tenderers for the purpose of discussing any matter relating to RAMS Consultancy for Kochi Metro Rail Projects. The Tenderer should address any request for a meeting along with the clarification regarding the tender to KMRL in writing not later than 3 weeks before latest date submission of Tender. The Employer will, as soon as practicable after receipt of such request, inform the Tenderer whether the Employer considers it appropriate for the requested meeting to be held and, where applicable, the time and place for such meeting. Such a meeting will be held in confidence but the Employer reserves the right to circulate to all other Tenderers any written response it may decide to issue in relation to matters raised at any such meeting and affecting all Tenderers, without identifying with whom the meeting has been held.

6.5. RAMS Audit and Assessment Plan

- 6.5.1. The tenderer shall submit a detailed overall RAMS audit plan and assessment, Appendix I: Form 11 on services indicated in the scope of services including any other relevant information.
- 6.5.2. The RAMS audit plan programme shall be prepared in terms of weeks from Letter of Acceptance (LoA).

6.6. Project Management Plan

- 6.6.1. The Tenderer shall submit with his Tender a Project Management Plan as prescribed in Employer's Requirements as Appendix I: Form 7, inter-alia, indicating names, qualifications, professional experience, location during the Contract period and corporate affiliation of all proposed key management and engineering personnel (above the level of supervisor) and specialists.
- 6.6.2. The Tenderer shall include his proposals for his Co-ordination Control Team and include the name and qualifications of the Team Leader.

6.7. Pricing Document

- 6.7.1. The Pricing document is included in Appendix I: Form 17 (A to D). The Tenderer shall complete the Pricing Document in accordance with the instructions given in Annexure 1. The completed Pricing Document shall be submitted as Appendix I: Form 17 (A to D).
- 6.7.2. Prior to award, the Tenderer shall reformat the Pricing Document, Schedule of Milestones, and the RAMS audit plan and Programme, so as to correlate between these documents, as required by the Employer.

6.8. Currencies of Tender and Payment

- 6.8.1. The Tenderer may give his priced offer in Indian Rupees, and/or freely convertible international trading currencies. Payment to the contractor shall be made in the currencies quoted.
- 6.8.2. For the purpose of comparative evaluation of the offer, the tender prices will be converted to Rupees by using the Exchange (selling) rates for those currencies on the latest date for submission of tenders (Base Date) as detailed in clause 10.5 of ITT.

6.9. Tender Index

The tenderer shall include with his tender an index Appendix I: Form 9 which cross refers all of the Employer's tender requirements elaborated in these documents to all the individual sections within Tender No. KMRL/RAMS/04/2015: Technical package and Tender No. KMRL/RAMS/04/ 2015 Financial package that the tenderer intends to be the responses to each and every one of those requirements.

6.10. Modification, Substitution and Withdrawal of Tenders

- 6.10.1. Except where expressly permitted by these instructions, the Tenderer shall not make or cause to be made any alteration, erasure or obliteration to the text of the documents prepared by the Employer and submitted by the Tenderer with or as part of his Tender.
- 6.10.2. The Tenderer's modification or withdrawal notice shall be prepared, sealed, marked and delivered, with the outer and inner envelopes additionally marked "MODIFICATION" or "WITHDRAWAL", as appropriate.
- 6.10.3. No Tender may be modified by the Tenderer after the deadline for submission of Tenders.
- 6.10.4. Withdrawal of a tender during the interval between the deadline for submission of bids and the expiration of the period of bid validity specified in the Proposal Submission Form shall result in the forfeiture of the Tender Guarantee.

6.11. Pricing of condition, Qualification, Deviation etc.

- 6.11.1. Tenderer shall further note that except for deviations listed in Appendix I: Form 14, Tenderer shall be deemed to comply with all the requirements in the tender documents including employer's requirements, without any extra cost to the employer irrespective of any mention to contrary, anywhere else in the tender.

7. Financial Package

- 7.1. The Tenderer shall submit the following documents duly completed with the Financial Package of his tender submission:
 - i. Copy of tender guarantee
 - ii. All items covered in clause 6.2.3
- 7.2. The financial proposal, which is Appendix I: Form 17 (A to D) should be separately completed and submitted in a separate sealed envelope clearly labelled "FINANCIAL PROPOSAL". The prices entered into the form of tender shall include all costs associated with the contract. These will cover remuneration for staff, transportation, equipment, printing of documents, surveys (if required) etc. No adjustment will be made for inflation and any fluctuation in the exchange rates between Indian

Rupees and other currencies. The financial proposal should be prepared using, but not limited to, the formats provided in Appendix 1: Form 17.

- 7.3. The tenderer should quote fixed lump sum price in Indian Rupees and in a foreign currency wherever required keeping in view the stage payment schedule described in Appendix I: Form 17 and Terms of Reference. Quotes in foreign currency will be paid in equivalent INR converted on the basis of TT buying rate of SBI prevailing on the last working day of the previous calendar month due. The Consultant may convert INR into any foreign currency as per applicable laws and the exchange risk, if any, shall be borne by the Consultant
- 7.4. This Contract is a fixed Lump Sum priced Contract for RAMS Consultant for Kochi Metro Rail Project. The contract price shall be fixed throughout the performance of the contract and not subject to variation on any account except as provided for in the Contract.
- 7.5. Tenderer shall quote all prices inclusive of all taxes, duties, levies, cess and any other charges that may be levied.

7.6. Change in Cost Due to Legislation.

- 7.6.1. "Change in Law" means the occurrence or coming into force of the following, at any time after 28 days before the closing date of submission of tender.

- (a) Any new tax imposed which impacts the performance of the Contractor with increased cost or which results in extra financial gains to the Contractor due to decreased cost in execution of Works.

- (b) Change in any law pertaining to work having the above said impact.

Then such additional or reduced cost shall be certified by the Engineer after examining records provided by the Contractor and shall be paid by or credited to the Employer.

- 7.6.2. If any rates of Taxes/Duties/levies are increased or decreased, or a new Taxes/Duties/Levies are introduced, or an existing Tax/Duty/Levy is abolished, after 28 days before the closing date of submission of the tender, which was or will be assessed on the Contractor, in connection with performance of the Contract, an equitable adjustment of the Contract Price shall be made to fully take into account any such change by addition to the Contract Price or deduction there from, as the case may be, in accordance with Clause 7.6 thereof

- 7.7. All tax liabilities and the cost of insurance related to this contract shall be separately shown.

7.8.

- (a) All payments shall be subject to tax deduction at source in accordance with the provisions of the Indian Income Tax act and any other applicable law. The contractor shall ensure full compliance with tax laws of India with regard to this contract and shall be solely responsible for the same. He shall submit copies of acknowledgements evidencing filing of returns every year and shall keep the employer fully indemnified against liability of tax, interest, penalty etc., of the contractor in respect thereof, which may arise.

- (b) The contractor should obtain necessary certificate from the Assessing Officer, under the relevant provisions of the Income Tax Act of India, for the rate at which income tax is to be deducted from the payments made to him. Pending submission of such certificate, KMRL will deduct income tax at source as per applicable provisions under the Income Tax act. The contractor may, therefore, submit the certificate before the advance payment becomes due.

- 7.9. Not used
- 7.10. The tender total submitted by the tenderer shall be in the format shown in the Pricing document.
- 7.11. The pricing document completed and submitted by the tenderer, as part of his tender, should use an indexing and page numbering system such that its extent and completeness is clearly evident.

8. Period of Validity of Proposal and Tender Guarantee

- 8.1. The offer submitted by the tenderer shall be valid for a period of 180 days from the last date of submission of the tender, with a provision that it will be suitably extended on request of KMRL.
- 8.2. The Tenderer shall submit with his Tender a Tender Security for the sum of Rs. Two Lakhs or equivalent amount in a single freely convertible foreign currency in the form of an irrevocable bank guarantee issued by a Scheduled Commercial Bank (including Scheduled Commercial Foreign Banks) in India as per Appendix I: Form 16. The Bank Guarantee should be in the name of the Applicant or "JV/Consortium". In the case where the Tenderer is a JV or consortium, the Bank Guarantee for Tender Security shall be from JV/Consortium and not from individual members, except that a local member of the JV/Consortium is permitted to furnish the Tender Security with an assurance from the other JV/Consortium members to back such a Security. The Tender Security shall be submitted in a sealed envelope clearly marked on top "Tender Security for Tender No. KMRL/RAMS/04/2015". The Tender Security shall remain valid for a period of 28 days beyond the validity period for the Tender.
- 8.3. The original of this tender guarantee is to be submitted in a separate sealed envelope in addition to the Technical and Financial proposal envelopes at the time of submittal. This envelope will be opened in the presence of the tenderers to determine compliance of this requirement. Offers submitted without the tender guarantee or with invalid bank guarantees will be rejected outright.
- 8.4. The tender guarantee of the successful tenderer will be returned upon receipt of a performance guarantee and the signing of the contract as required herein.
- 8.5. The tender guarantees furnished by the unsuccessful tenderers will be returned to them within 30 days of the signing of the contract by the successful tenderer and the receipt of the Performance guarantee from the successful tenderer whichever is later.
- 8.6. KMRL reserves the right to call-in the tender guarantee under the following circumstances:
 - i. Withdrawal of tender during period of tender validity
 - ii. Failure to sign the contract if so awarded to the tenderer
 - iii. Failure to submit a performance guarantee

9. Submission of Tenders

- 9.1. Tender submittals comprising:
 - i. Power of attorney to submit the tender
 - ii. Original of tender guarantee
 - iii. Technical package
 - iv. Financial package

9.2. Each page of both the “Technical Package” and “Financial Package” must be machine serial numbered and signed by the authorised signatories of the consortium in token of the acceptance of the conditions stipulated in the page of the tender document.

9.3. All the inner and outer envelopes shall be addressed to the Employer at the following address:

**The General Manager (S&T),
Kochi Metro Rail Limited
8th Floor, Revenue Tower, Park Avenue,
Kochi-682011, Kerala, India**

(a) Bear the following identification:

**RAMS TENDER PACKAGE
Tender Reference Number: KMRL/RAMS/04/2015
DO NOT OPEN BEFORE Hrs. on.....**

9.4. Name and address of the Tenderer to enable the tender to be returned unopened in case it is late or delayed.

9.5. The Tenderer shall seal the original and copies of his Technical Package in separate envelopes, duly marking them as "Original", "Copy 1" and "Copy 2". All the envelopes of the Technical Package shall then be sealed in an outer envelope. Soft Copy in CD shall also be submitted.

9.6. Likewise, the Tenderer shall seal the Original and Copy of the Financial Package in separate envelopes duly marking the envelopes as “Original” and “Copy”. Both envelopes of the Financial Package shall be sealed in an outer envelope.

9.7. If the outer envelope is not sealed and marked as above the Employer will assume no responsibility for the misplacement or premature opening of the tender.

10. Tender Opening and Evaluation

10.1. Tender Opening

10.1.1. The Employer or his authorised representative will open the Technical Package in the presence of tenderers or their representatives who choose to attend at the appointed day and time in the conference hall of Kochi Metro Rail Limited, 8th Floor, Revenue Tower, Park Avenue, Kochi-682011, Kerala, India. If such nominated date for opening of Tender is subsequently declared as a Public Holiday by the Employer, the next official working day shall be deemed as the date of opening of Tender. The Tender of any Tenderer who has not complied with one or more of the foregoing instructions may not be considered.

10.1.2. The Tenderer is advised that the Employer's policy in respect of comparison of tenders is that the Technical Packages will be opened and reviewed to determine their eligibility and responsiveness to the Employer's Requirements. Unacceptable and unresponsive tenders will be rejected and the corresponding Financial Package will be returned unopened.

10.1.3. The Tenderer is to note that Financial Package of these tender submissions for which the associated Technical Package has satisfied the review in sub-paragraph 10.6, will be opened and the tender sums posted. The date, time, and place of opening will be advised to tenderers whose

Technical Package have been found acceptable so that they can be present at the stipulated time of opening of Financial Package.

10.1.4. Tender if not accompanied by a valid Tender Guarantee, or is accompanied by an unacceptable or fraudulent Tender Guarantee shall be considered as non-compliant and rejected.

10.1.5. All decisions whether a tender is non-responsive, unacceptable or whether a guarantee is fraudulent or unacceptable or non-compliant will be that of the Employer.

10.2. Confidentiality of Tender Information

The Tender Invitation Documents, as listed in paragraph 5.1.1 above, and any addenda thereto, together with any further communications are issued for the purpose of inviting tenders only. The Tenderer shall not disclose any information contained in the documents or otherwise supplied in connection with this tender invitation to any third party except for the purpose of preparing his Tender. The Tenderer shall maintain complete confidentiality till the Contract is awarded. In the event that such confidentiality is breached, the Employer may reject the Tender. A letter of undertaking is attached to Appendix I: Form 12 – Copyright undertaking and shall be completed by the tenderer and returned in Technical package.

10.3. Clarification of Tender

To assist in the examination, evaluation of tender, the Employer may, at his discretion, ask the tenderer for clarification of his tender. The request for clarification and the response shall be in writing or by facsimile. No change in the price or substance of the tender shall be sought, offered or permitted, except as required to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the tenders in accordance with paragraph 10.4 below.

10.4. Correction of Errors

10.4.1. The fixed Lump Sum Price stated by the Tenderer in words (at the top of the Tender Total Page) shall prevail. If arithmetical errors are discovered in the apportionment of this amount into Sections, Cost Centres and/or Milestones, corrections will be made by the Employer proportionately to the amounts shown against the relevant Sections, Cost Centres and/or Milestones so that the sum total of all milestones in all Sections, Cost Centres is equal to the Fixed Lump Sum Price stated in words. If the tenderer does not accept the corrected tender his Tender will be rejected, and the Tender Guarantee forfeited. Where there is a discrepancy between the amounts in figures and in words, the amount in words will govern.

10.5. Conversion to Single Currency for Evaluation of Tender

The Employer will convert the amounts in various currencies in which the tender price is payable to Indian National Rupees(INR) at Bill Selling Exchange Rates officially prescribed for similar transactions at the close of business of the State Bank of India on the last working day 28 days before the closing date of submission of tender..

10.6. Evaluation of Tender: Technical Package

10.6.1. The Employer will evaluate whether each Tenderer is eligible and each Tender is responsive to the requirements of the Tender documents.

10.6.2. Eligibility of Tenderer:

An eligible Tenderer is one, who fulfils all the requirements of Appendix I: Form 10. If a Tenderer is not eligible, it will be rejected by the Employer and further evaluation will not be carried out.

10.6.3. Responsiveness of Tenderer:

A responsive Tender is one, which conforms to all the terms, conditions and specifications of the Tender documents without material deviation or reservation. A material deviation or reservation is one:

- i. Which affects in any substantial way the scope, quality or performance of the Works; or
- ii. Which limits in any substantial way, is inconsistent with the Tender documents, the Employer's rights or the Tenderers obligations under the Contract; or
- iii. Seeks to shift to the Employer, another Government Agency or another contractor all or part of the risk and¹ or liability allocated to the Contractor in the Tender Invitation Documents; or
- iv. Includes a deviation from the Tender Invitation Documents which would render the works, or any part thereof, unfit for their intended purpose; or
- v. Fail to commit to the date specified for the completion of the Works.

10.6.4. Fail to commit to the date specified for the completion of the Works, the Employer will determine:

- i. Whether the Tender has been properly signed;
- ii. Whether the Tender is accompanied by the required Tender Guarantee
- iii. Whether the proposed work plan including staffing schedule and methodology in responding to the scope of work is adequate.
- iv. qualification, experience and competency of the key staff to be deployed for the assignment
- v. Whether the Tender is substantially responsive to the requirements of the Tender documents;

10.6.5. The employer may waive any minor deviation, non-conformity or irregularity in a Tender that does not constitute a material deviation.

10.6.6. If the Tender is not substantially responsive, it will be rejected by the Employer, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

10.6.7. If any change in the Employer's Requirements (Terms of Reference) and/or Conditions is considered necessary during Tender evaluation, the Tenderer, if his technical offer is found to be substantially responsive in accordance with Tender requirements, will be given opportunity to revise his financial package.

11. Criteria for Evaluation

11.1. Evaluation of Technical Proposals

In the first stage, the Technical Proposal will be evaluated on the basis of methodology and Work Plan proposed by the Applicant, experience of Applicant, and experience of Key Experts fielded by the Applicant. Applicants shall be ranked as per score achieved by them, from highest to the lowest technical score (S_T) .

In case the Applicant is a Consortium, credentials of all Partners shall be considered together while computing the technical score on account of experience of Key Experts in view of clause 6.2.5 and on account of Applicant's experience.

The scoring criteria to be used for evaluation shall be as follows:

Description	Max. Marks	Basis of marks and Eligible assignments
Tenderer (JV/ Consortium)	60	Please see NOTE below
Firm/Consortium Experience	35	(a) 60% of the maximum marks shall be awarded for the number of Eligible Assignments undertaken by the Applicant firm/ consortium. Out of these 60% marks, 70% will be given for clearing the basic eligibility requirement and balance 30% will be for additional EAs done as per Annexure II. (b) The remaining 40% shall be awarded for the comparative size of Eligible Assignments and Annual Revenue received from consultancy business by the Applicant.
Methodology and Work Plan	25	Understanding of and responsiveness to TOR
Key Expert Experience	40	
RAMS Expert	20	Basis of marks: Completed assignments as per defined eligible assignment, as RAMS Expert Eligible assignments for RAMS Expert will include: Completed assignments for RAMS on all disciplines of Rail Systems during design, construction and testing and commissioning of Metro projects that are in commercial operation.
Operation Expert	20	Basis of marks: Completed assignments as per defined eligible assignment, as Operation Expert Eligible assignments for Operation Expert: Completed assignments for Operations planning and managements during design, construction and testing and commissioning and operations of Metro projects that are in commercial operation.
Grand Total	100	

NOTE: The basis of giving marks for all key Experts will be as below:

- Out of the maximum marks, 60% shall be awarded for the number of Eligible Assignments (As defined above in clause 6.2.5) undertaken by the individual key Expert.
- The remaining 40% shall be awarded for the comparative size and relevance/quality of Eligible Assignments (As defined above in clause 6.2.5).
- Key Expert having higher numbers of Eligible Assignments shall be awarded higher marks.

- (d) The detailed evaluation based on above mentioned principles will be done for each applicant as per the format of detailed evaluation sheets given at 'Annexure II'.

11.2. Short-listing of Applicants

Of the Applicants ranked as aforesaid, After the above, the top three Applicants shall be pre-qualified and short listed. If the short list for has less than three applicants and there are applicants available having score 70% or more, the name of the applicant in the order of ranking shall be included to draw a list of maximum three applicants.

However, if the number of such pre-qualified Applicants appearing in the shortlist is less than two, KMRL may, in its sole discretion, pre-qualify the Applicant(s) whose Technical Score is less than 70 marks provided that in such an event the total number of pre-qualified and short-listed Applicants shall not exceed three.

11.3. Rejection of Tenders

KMRL may reject the tenders that are considered to be substantially non-responsive to the requirements of the Proposal. Such matters may include:

- i. Incorrect or Fraudulent Power of Attorney.
- ii. Incorrect or Fraudulent "Tender Security"
- iii. Incomplete "Technical Proposal".
- iv. Incomplete "Price schedule".
- v. Tenderer/Bidder requires an increase in Tender Offer price during negotiations.
- vi. Failure to provide the Performance Guarantee.
- vii. Failure to sign the Contract Agreement within the time limit given by KMRL.

11.4. Evaluation of Tender: Financial Package

The Financial Proposals of those Applicants who have not been shortlisted on the basis of Technical evaluation shall be returned un-opened to the Applicants

In the second stage, the financial evaluation for each package will be carried out as per Clause 11.6, each Financial Proposal will be assigned a financial score (S_F).

For financial evaluation, the total cost indicated in the Financial Proposal, Costs, will be considered.

KMRL will determine whether the Financial Proposals are complete, unqualified and unconditional. The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of services. Omissions, if any, in costing any item shall not entitle the firm to be compensated and the liability to fulfill its obligations as per the TOR within the total quoted price shall be that of the Consultant. The lowest financial proposal (F_m) for will be given a financial score (S_F) of 100 marks. The financial scores of other proposals will be computed as follows:

$$S_F = 100 \times F_m/F \text{ where } F = \text{amount of Financial Proposal}$$

11.5. Combined and Final Evaluation

Proposals will finally be ranked for each package according to their combined technical (S_T) and financial (S_F) scores as follows:

$$S = S_T \times T_w + S_F \times F_w$$

where, S is the combined score, and T_w and F_w are weights assigned to Technical and Financial Proposals that shall be 0.80 and 0.20 respectively.

The successful Applicant for consideration of award shall be selected based on highest ranking in the combined score.

11.6. Financial Evaluation:

For purpose of comparative evaluation and determination of inter-se position of Tenders received as per clause 10.5, the Employer will adjust the Base Tender Total to take into account the followings:

- (a) Corrections for errors pursuant to clause 10.4 of ITT and
- (b) Pricing of un-qualified withdrawals of conditions, qualifications, deviations etc. in accordance with Appendix I: Form 17 and subject to clause 6.2.4 of ITT for the purpose of comparative evaluation of the Tenders.

- 11.7. The Employer reserves the right to accept or reject any variation, deviation or alternative offer. Variations, deviations, alternative offers and other factors which are in excess of the requirements of the Tender documents or otherwise result in the accrual of unsolicited benefits to the Employer shall not be taken into account in Tender evaluation.

12. Award of Contract

- 12.1. The Employer will issue a letter of acceptance to the Tenderer, if he has been determined to be substantially responsive to the Tender documents and has highest ranking in the combined score.

12.2. Signing of Agreement

The Tenderer should note that in the event of acceptance of the tender, the Tenderer will be required to execute the Contract Agreement, within 28 days from the date of issue of Letter of Acceptance.

- 12.3. The Employer reserves the right to accept any Tender and to reject any or all Tenders

- 12.3.1. The Employer is not bound to accept the lowest or any tender and may at any time by notice in writing to the Tenderer, terminate the tendering process.

- 12.4. The work location of the RAMS Consultant is covered in the Scope of Service.

- 12.5. The Employer may request the Tenderer to withdraw any of the conditions, qualifications, deviations etc., at the price shown in Appendix I: Form 17. In case the Tenderer does not withdraw the conditions, qualifications, deviations etc., proposed by him, if any, at the cost stated in Appendix I: Form 17, the tender will be rejected and the tender guarantee forfeited.

13. Performance Guarantee

- 13.1. The performance guarantee will be 10% of the contract price in the form of an irrevocable bank guarantee issued by a Scheduled Commercial Bank (including Scheduled Commercial Foreign Banks) in India. The pro-forma for the guarantee is included in these documents. The performance guarantee should be submitted immediately after the RAMS contractor receives the letter of

acceptance, but not later than the date of agreement is signed between the parties. Alternatively, KMRL will retain by way of performance security, 10% (ten percent) of all the amounts due and payable to the Consultants.

- 13.2. The performance guarantee shall remain valid up to 90 days after the expiry Defect Liability Period for whole of the work.
- 13.3. The Tenderer should note in particular that without prejudice to the Employer's other rights under the Contract and the Tender Guarantee, the Employer may terminate the Contract in the event that the Tender is accepted but the Tenderer fails to supply the Performance Guarantee or other specified documents or fails to execute the Contract Agreement.

14. Additional Information

- 14.1. Every effort will be made to provide additional information to tenderers that has been requested in writing. However, requests for additional information, and any delay in providing information is entirely at tenderer's risk, and shall not be considered as a reason for late delivery of tenders or a reason for delaying the submission of tenders by the stated date.
- 14.2. Any information provided by KMRL that is not given in writing, in response to request for additional information, shall not be considered by KMRL and shall not be accepted as a reason for late delivery of tenders or a reason for delaying the submission of tenders by the stated date.

15. Date of completion

- 15.1. The contract period shall be from date of LoA and continued upto 2.5 years after the ROD of the last of 22 stations (Aluva to Petta corridor).

16. Tender Preparation Costs

Any costs associated with the preparation of the proposal by any tenderer will not be reimbursed.

Terms of Reference

1. INTRODUCTION

1.1. Scope Overview

This document describes the Scope of Services to be provided by the RAMS Consultant for KMRL project (Highlights tabulated at 8)

In brief, the RAMS Consultant shall carry out the whole of Reliability, Accessibility, Maintainability & Safety (RAMS) for the Kochi Metro Rail Projects. The Consultancy will include the interfaces with any other systems.

1.2. Applicable Documents

The Applicable Documents for the Services are:

The RAMS Consultancy Agreement

- all documents of the Agreement

The KMRL Project Contracts (Rolling Stock, Signalling & Telecommunications, Electrical & Mechanical, Power Systems & Traction, SCADA, Lifts & Escalators, Depot Facilities, Track, PSG, Smart OCC, RSS and AFC)

1.3. Definitions and Abbreviations

Kochi Metro Rail Limited (KMRL) is the Employer and is responsible for construction, operation, & maintenance of Kochi, Aluva to Petta Corridor.

The System RAMS Plan refers to the Reliability Accessibility Maintainability & Safety (RAMS) Plans and Procedures developed by all Kochi Metro Contractor for the Kochi Metro Rail Projects. These Plans and Procedures will detail the activities and analyses that ensure adequate measures have been taken to implement a Reliability Accessibility & Maintainability (RAMS) system as required in the Systems Specifications of the Kochi Metro Rail Project.

FMEA: Failure Mode and Effect Analysis

PHA : Preliminary Hazard Analysis

HAZOPs/ HAZIDs: Hazard and Operability Analysis/Hazard Identification Studies.

FMECAs: Failure Mode Effect and Criticality Analysis

LCC: Life Cycle Cost

IP/ESS: Ingress Protection /Electrostatic Shielding

RIAC 217 Plus: Methodology for Reliability Protection by RIAC (Reliability Information Analysis Centre)

DRACAS/FRACAS: Defect Report Analysis and Corrective Action System / Fault Report Analysis and Corrective Action System.

FTA: Fault Tree Analysis

ROD: Revenue On Date.

2. OVERVIEW OF THE PROJECT

2.1. General

This Chapter gives an overview of the Project. Information provided in this Chapter is for reference purposes only. For additional details refer to General Specifications

- 2.2. The Aluva – Petta Corridor of the Kochi Metro Rail Project has a total length of 24.91 Km between Centre Lines of end stations (25.61 Km between dead ends) fully constructed on elevated viaduct with 22 elevated stations, of which 7 stations will have points & crossings required to be interlocked for train movements.

It is envisaged that there may be four stages of commissioning to revenue service with about six months interval between the four dates of revenue service. The proposed two stages are:

- (i) 1st Stage R1 section: ALUVA to PALARIVOTTAM (inclusive) = About 13 Km with ELEVEN stations
- (ii) 2nd Stage R2A Section: PALARIVOTTAM (Excl.) to MAHARAJA'S COLLEGE (Inclusive) = About 5 Km with FIVE Stations
- (iii) 3rd Stage R2B Section: MAHARAJA'S COLLEGE (Excl.) to Kadavanthra (Incl.) = About 2 Km with TWO stations
- (iv) 4th Stage R2C Section: Kadavanthra (Excl.) to PETTA (Inclusive) = About 4.8 Km with FOUR Stations.

There may be a possibility of further extension of the network during the pendency of the contract by another 1.8 Km to Triupunithura from Petta with about two additional stations. Feasibility is also being explored for expansion of the Metro in future on a branch line of about 9.5 Km with 6 stations to Kakkanad taking off from JLN stadium.

Line diagram indicating stations and turnouts may be seen in Tender Drawings.

3. Salient Features

Sr. No	Features
1	Track Gauge (nominal) with UIC 60 Rails : 1435 mm
2	Route Length between dead ends : Elevated 25.61 KM
3	No. Of Stations : 22
4	Typical Dwell time: 30 sec;
5	Signalling & Train Control System is Communication based train control. Axle counters are used for secondary detection.

6	Traction Supply : 750 V D.C Third Rail system, bottom collection
7	Revenue service Hours: 0500 Hrs to 2300 Hrs Normal service days – may differ
8	Rolling Stock: Air-conditioned, 3-Car, Stainless Steel or aluminium, max 2.9 Meters wide, about 21.6 Meters Long, 15 Ton Maximum Axle load
9	Operations Control Centre at depot
10	Depot Control Centre at depot same building of OCC.

In future, KMRL plans to upgrade to DTO (Driverless Train Operation) / UTO (Unattended Train Operation) in accordance with the relevant standards.

4. Contractor, Employer and Engineer

The Delhi Metro Rail Corporation (DMRC) was entrusted with the tasks of preparing the Feasibility Studies, the Detailed Project Report (DPR) .

DMRC were later been appointed as the Employer and Engineer for execution of the Kochi Metro Rail Project. Suitable interaction with DMRC should be done by The RAMS Consultant for getting the inputs.

A preliminary list of Project Contracts is given below:

SL No	Contract Name	Description of Work	Name of the Contractor
I	CIVIL Works		
1	KC 1	Road diversion works and Mass Earth filling	Bridge & Roof Co. (I) Ltd.
2	KC 2	Construction of Elevated Viaduct and 6 Stations (Aluva to Kalamassery) from Chainage -120.00 m to 7055.218 m.	L&T Construction
3	KC 3	Construction Elevated Viaduct and 6 Stations (CUSAT to JLN Stadium) from Chainage 7055.218 m to 14580.00 m	L&T Construction
4	KC 4	Construction of Elevated Viaduct and 5 Stations (Kaloor to Ernakulam South) from Chainage 14580.00 m to 19329.685 m	Soma Construction
5	KC 5	Construction of Elevated Viaduct and 3 Stations (Vytila to Petta) from Chainage 22330 m to 25119.278 m	ERA Rankein JV
6	KC 5A	Segmental Balanced Cantilever Bridge across South Railway	L&T Construction
7	KC 5B	Construction of Elevated Viaduct and station from Manorama Jn to Elamkulam including Kadavanthra Station	Soma Construction
8	KC 5C	Construction of viaduct from Elamkulam to Vytila including Elamkulam Station from Chainage 21236.702 to 22330	Soma Construction

SL No	Contract Name	Description of Work	Name of the Contractor
9	KC 6	Work Cancelled	
10	KC 7	Construction of box pushing type RCC - RUB at NH 47	Vijaya Infra Project Pvt. LTD
11	KC 8	Work Cancelled	
12	KC 9	Mass earth filling in Muttom Depot	DEENS Constructions
13	KC 10	Construction of RCC Retaining wall etc., for Muttom Depot	Bridge & Roof Co. (I) Ltd.
14	KC 11	Construction of civil works, internal drainages, roads etc for Muttom Depot	McNally Bharat Engineering Company Limited
II TRACK			
1	KT1	Supply of 7000MT UIC60,1080 Grade HH rails	M/s Tata Steel France Rail S.A.
2	KT2	Design Manufacturing and supply of standard gauge UIC 60Turnouts	M/s Voestalpine VAE GmbH-Voestalpine VAE VKN India Pvt. Ltd.
3	KT3	Ordinary Rail for Muttom Depot	M/s Jindal Steel & Power Ltd.
4	KT 4	Supply Installation Testing and Commissioning of Ballast less Track of Standard Gauge	M/s IRCON International Ltd.
5	KT 5R	Supply,Installation, testing and commissioning of standard guage track work in muttom depot	M/s IRCON International Ltd.
III ELECTRICAL			
1	KE 1	Shifting/Raising/Converting to UG cable of EHT lines crossing Kochi metro route for Maintaining statutory clearance Chainage 340, Pack-1	Vindhya Telelinks Ltd
2	KE 2	Shifting/Raising/Converting to UG cable of EHT lines crossing Kochi metro route for Maintaining statutory clearance Chainage 2477, Pack-2	Vindhya Telelinks Ltd
3	KE 3	Shifting/Raising/Converting to UG cable of EHT lines crossing Kochi metro route for Maintaining statutory clearance Chainage 3110 & 6292	Vindhya Telelinks Ltd
4	KE 4	Shifting/Raising/Converting to UG cable of EHT lines crossing Kochi metro route for Maintaining statutory clearance Chainage 2623 & 2888	Vindhya Telelinks Ltd
5	KE 5	Shifting/Raising/Converting to UG cable of EHT lines crossing Kochi metro route for Maintaining statutory clearance Chainage 5282, 5492, 5605 & 8006	Fathima Engg Co.
6	KE 6	Shifting/Raising/Converting to UG cable of EHT lines crossing Kochi metro route for Maintaining statutory clearance Chainage 23525	Amritha Associates
7	KE 7	Shifting/Raising/Converting to UG cable of EHT lines crossing Kochi metro route for Maintaining statutory clearance Chainage 24959	Vindhya Telelinks Ltd
8	KE 8	Shifting/Raising of EHT line along the muttom depot yard of Kochi metro project for maintaining statutory clearance from locations 12 to 17 of KAT/KLK 66KV DC feeder	Red Star Construction

SL No	Contract Name	Description of Work	Name of the Contractor
9	KE 9	Modification of three EHT lines behind Vytilla hub, two lines to be lifted up & one line to be made in to U/G	
10	KE 10	Supply, installation, testing & commissioning of E&M, Fire detection & fire suppression systems including DG sets for elevated stations of Aluva-Petta line and Muttom Depot of Kochi metro rail project.	-
11	KE 11	Design, Manufacture, supply, installation, testing and commissioning of machine room less elevators for Kochi metro rail project.	-
12	KE 12	Design, Manufacturing, supply, installation, testing and commissioning of escalators for Kochi metro rail project.	Johnson
13	KE 13	Design, Verification, Detail Engg, Manufacturing, supply, installation, testing and commissioning of 750V DC third rail traction Electrification system and Auxiliary Substation (ASS) & associated SCADA system	Alstom
14	KE 14	Supply, Installation, testing & commissioning of main S/S including HV cabling from grid S/S for Aluva-Petta line of KMRL project.	Alstom
15	KE 16	Installation of street lighting arrangements along the metro corridor	M/s Bajaj Electricals Limited
IV	RS and S&T,AFC		
1	KRS1	Design, Manufacture, Supply, Testing, Commissioning and Training of 75 No. Standard Gauge Cars with an option to procure Additional Cars (Up to 75 Nos.) for Kochi Metro Rail Project Tender	M/s Alstom Transport India Limited & Alstom Transport SA, France
2	KS1	Design, Manufacture, Supply, Installation, Testing And Commissioning Of Signalling & Train Control And Telecommunication System For Kochi Metro Rail Project Contract	-
3	KMRL/ AFC/PT/ 2014	Financial Institution (FI) led consortium for open loop, contactless smart card based Automatic Fare Collection system for Kochi Metro Rail and other public transport systems of Greater Kochi	-

5. Scope of Services

TASKS	Scope Of Tasks
Preliminary Design Stage – Deliverable 8.1	
Identify system Safety requirements from the client's requirements, govt targets or best safety requirements of comparable metros	Identify any system level safety requirements from the client's documents or government targets. Alternatively safety requirements of equivalent metros in India or first world countries can be used to derive system safety requirements.

TASKS	Scope Of Tasks
	Review the supplier contracts and establish Safety Assurance requirements. Essentially the Assurance process shall be compliant with EN50126/50128/50129.
Collate RAMS requirements from the subsystems and produce System RAMS specification	Analyze the System contracts (Rolling Stock, Signaling & Telecom, E&M, Traction, SCADA, Depot Facilities, Track etc). Integrate the RAMS requirements to establish System level RAMS specification. Any gaps to be identified and adequate mitigations to be proposed.
Production of System Safety Plan	A system safety plan shall be produced to meet the safety assurance requirements
Production of System RAMS plan	A specific System RAMS plan to be produced in accordance with EN50126
Flow chart and algorithm	Submit flowchart and algorithm for generating the overall RAMS requirements
Establish safety programme consistent with the subsystem safety delivery.	Review of the various supplier safety programmes and the System safety programme shall be scheduled.
Establish RAMS programme integrated to the project design development phases	Review of the various supplier programmes and the System RAMS programme of activities shall be scheduled.
Review and Update of system safety plan	The system safety plan shall be submitted for review by the stakeholders and the comments will be satisfactorily addressed.
Review and update of System RAMS plan	The system RAMS plan would be submitted for review by the stake holders and the comments will be satisfactorily addressed.
Review of supplier Preliminary Hazard analysis (PHA)	Review supplier Preliminary Hazard analyses and identify system effects as potential hazards for the system PHA and identify residual risks for which operating procedures would need to be drafted and implemented to mitigate the hazard for all systems. System should integrate to ISA measures and ensure the safety levels as per standards.
Review of supplier Preliminary FMEAs	Supplier preliminary FMEAs for Rolling stock, Signalling, power, Telecoms shall be reviewed. Support shall be provided to the suppliers to resolve any RAMS issues identified
System Preliminary Hazard Analysis	A system PHA shall be undertaken doing an end-to-end operability analysis and integrating the system effects from the supplier PHA. The end-to-end study shall be undertaken using 'day in the life' approach. Identify residual risks for which operating procedures would need to be drafted and implemented to mitigate the hazard for all systems. System should integrate to ISA measures and ensure the safety levels as per standards.

TASKS	Scope Of Tasks
Hazard Log	A hazard log capturing railway level hazards shall be maintained throughout the project life cycle. The hazard log will also need to trace the railway level hazards to the hazards identified in the suppliers' PHA.
Initial System Quantitative Risk Assessment (QRA)	<p>Define top level system safety risks such as</p> <ol style="list-style-type: none"> 1. Collision 2. Derailment 3. Train fire 4. Explosion 5. Power failure 6. Station fire 7. Trackside fire 8. Lifts failure 9. Platform Train Interface incident 10. On train incidents <p>Fault trees shall be constructed for top level risks and show the contributors from each subsystem/products/ ops and maintenance to these risks. The contributors can be identified in the subsystem hazard logs. At this stage the initial risks from the subsystem level hazards shall be modeled in the fault tree.</p>
Preliminary System FMEA	Conduct preliminary system FMEA in accordance with EN60812. This FMEA shall integrate the output from the subsystem preliminary FMEAs. Adequate mitigation shall be identified to be implemented by O&M procedures
Review of supplier Preliminary RAMS analysis	Review of Supplier preliminary RAMS analysis demonstrating their apportionment of the subsystem RAMS requirements. Support shall be provided to the suppliers to resolve any RAMS issues identified. The purpose of this task would not be the appointment of the overall RAMS requirement onto subsystems but to ensure that all the results from the suppliers RAMS analysis demonstrate that the overall target can be achieved.
Preliminary System RAMS analysis	A Preliminary system RAMS analysis shall be undertaken to apportion the overall RAMS requirements to various subsystems based on the system effects established from the FMEA.
Detailed Design Stage – Deliverable 8.2	
Review of supplier HAZOPs /HAZIDs	Review of supplier HAZOPs/ HAZIDs for appropriate process, assessment and consistency. The system effects from these HAZOPs/HAZIDs become input for system hazard analysis
Review of Supplier FMECAs	Review of Supplier FMECAs for adequate coverage, accuracy and consistency. Adequacy of the failure detections and mitigations of the various failure modes justifying the availability predictions shall be verified.

TASKS	Scope Of Tasks
System HAZOP	An end-to-end HAZOP shall be conducted to identify any System hazards. This shall take the form of 'Day in the life' approach for the various railway normal operations, maintenance, and degraded/emergency operations.
Final System FMECA	A final quantitative system FMECA in accordance with EN60812 shall be undertaken. This will integrate the outputs from the supplier FMECAs. The system level mitigations shall provide the inputs to the railway O&M procedures
Review of supplier quantitative safety analysis	Supplier quantitative safety analyses such as fault trees shall be reviewed for adequate coverage, data used, accuracy and consistency.
Review of supplier Final RAMS analysis	Review of Supplier RAMS analysis and prediction report shall be undertaken for adequate coverage, accuracy and consistency.
Management tools & QPT measures	Generating the management tool for restoration of services in Quickest Possible Time (QPT) with various alternate solutions to management
Final System Quantitative Risk Assessment (QRA)	<p>Update top level system safety risks such as</p> <ol style="list-style-type: none"> 1. Collision 2. Derailment 3. Train fire 4. Explosion 5. Power failure 6. Station fire 7. Trackside fire 8. Lifts failure 9. Platform Train Interface incident 10. On train incidents <p>Fault trees shall be constructed for top level risks and show the contributors from each subsystem/products/ ops and maintenance to these risks. The contributors can be identified in the subsystem hazard logs. At this stage the residual risks from the subsystem level hazards shall be modelled in the fault tree.</p>
Final System RAMS analysis	A final system RAMS analysis and RAMS prediction report with a Fault Tree/RBD modelling shall be produced integrating suppliers outputs and estimating the system RAMS performance.
System Safety Case -Design	<p>An overall system safety case in accordance with EN50129 shall be produced integrating all the subsystem safety work as well as system level safety work. For major systems such as rolling stock, signaling etc. the suppliers would provide system safety cases covering their scope of supply.</p> <p>Identify the residual risks for which operating procedures would need to be drafted and implemented to mitigate the hazard for all systems. System should integrate to ISA measures and ensure the safety levels as per standards.</p>

TASKS	Scope Of Tasks
System Availability model	A system Availability model shall be constructed to evaluate mitigations and maintenance strategies to optimize the resources for maximizing the availability
System Lifecycle Cost report	<p>Based on the corrective/preventive/inspection/ refurbishment recommendations provided by the suppliers, a system LCC report shall be produced to guide the maintainer to allocate suitable budget for effective maintenance of the system.</p> <p>The system suppliers will provide details of spares lead-time, spares costs etc. for this task to be carried out. Consultant shall interface with the suppliers for such details.</p>
Manufacturing – Deliverable 8.2	
Review of Type test certificates, IP test certificates, ESS certificates (if any)	A review of the Type testing/IP/ESS certificates shall be undertaken to ensure the hardware robustness to deliver the desired RAMS performance.
Review of software reliability demonstration tests	A review of software reliability demonstration shall be undertaken to estimate software reliability using RIAC 217Plus model
Testing and Commissioning – Deliverable (8.3 & 8.4)	
System DRACAS / FRACAS procedure	A system DRACAS/FRACAS procedure shall be produced which shall ensure coherent failure data collection and allocation to the concerned supplier DRACAS/FRACAS processes.
System DRACAS / FRACAS management	Provide support for review of the FRACAS data managed by KMRL.
System Safety case – Testing and Commissioning	<p>An overall system safety case in accordance with EN50129 demonstrating that the railway is safe for service shall be produced.</p> <p>If the commissioning is stage commissioning separate submissions for each stage is required.</p>
RAMS REPORT & Modelling Reach R1, R2	<ol style="list-style-type: none"> 1. Submission Report & RAMS Model for Reach R1. 2. Submission Report & RAMS Model for Reach R2 and R1 –R2 Integration (Combined). <p>RAMS demonstration report shall be produced based on the Duane model to estimate the achievement of steady state.</p> <p>Consultants shall draft a RAMS demonstration plan that shall outline the rules for the RAMS demonstration.</p>
Defect Liability Period – Deliverable 8.5	

TASKS	Scope Of Tasks
Hazard Log	Hazard log shall be updated if any safety issues and its mitigations are revealed during initial operation. Identify residual risks for which operating procedures would need to be drafted and implemented to mitigate the hazard for all systems. System should integrate to ISA measures and ensure the safety levels as per standards.
System RAMS case including Reliability Growth demonstration report	A system RAMS case shall be produced presenting the RAMS argument and RAMS risks in accordance with Defence standard 0042.
System LCC report Update	An update to the LCC report shall be undertaken based on the in-service data and the likely steady state achieved.
RAMS demonstration report	A RAMS demonstration report shall be produced based on the Duane model to estimate the achievement of steady state.
Operating Procedures – Deliverable 8.6	
Operating procedures	Drafting the operating procedures for mitigating the residual risks identified at various stages of the assignment and assist KMRL for implementation of the same
QPT procedures	Drafting the various QPT procedures and handholding KMRL for implementation
Migration of procedures to KMRL digital platform	Assist KMRL and actively participate in the KMRL's endeavours to implement the automated (digital) system with regard to implementation of the risk-mitigating operating procedures on the digital system / ERP system.

6. Interaction

6.1. Authority

The Kochi Metro Rail Project Contractor will provide access to all the relevant design and product information at the RAMS Consultancy's request

The Kochi Metro Rail Project Contractor shall also supply all the documents as well as analyses as required by the RAMS Consultancy for his necessary verification and validation

The RAMS Consultancy shall closely coordinate and cooperate with KMRL and the Kochi Metro Rail Project Contractor during the RAMS process.

The RAMS Consultancy shall be present during the statutory inspection of the Commissioner of Metro Railway Safety (CMRS), and assist the Employer in providing answers to the questions of the CMRS related to the RAMS.

6.2. Disputes with the Kochi Metro Rail Project Contractor

In the event that there is a dispute or lack of cooperation by the Kochi Metro Rail Project Contractor, the RAMS Consultancy shall notify the Employer in writing within 48 hours and provide details of the full circumstances, impact to program and possible solutions to overcome the dispute.

6.3. Coordination between the RAMS Consultancy and the Kochi Metro Rail Project Contractor

The Employer and the RAMS Consultancy will meet with the Kochi Metro Rail Project Contractor at the kick-off meeting of the RAMS to discuss and agree on the Plan. After the kick-off meeting, the RAMS Consultancy shall regularly coordinate and interface directly with the Kochi Metro Rail Project Contractor /DMRC with all communications or notes of discussions forwarded to the Employer. The RAMS Consultancy shall submit the RAMS schedule of meetings and RAMS Audits with advance notice to enable the Employer to attend, if necessary.

6.4. Notification of RAMS Audits

The RAMS Consultancy shall conduct all Audits in accordance with the approved RAMS Audit and Assessment Plan. The RAMS Consultancy shall be responsible for liaising with the Kochi Metro Rail Project Contractor to ensure that he is fully aware of the scope and timing of the RAMS Audits and must give a minimum of 14 days' notice, in writing, before conducting the RAMS Audits.

6.5. RAMS Audit Locations

The RAMS Audits of the Kochi Metro Rail Project Contractor shall be performed at the Kochi Metro Rail Project Contractor's main premises in France, as well as sub-contractor/suppliers/other designated project contractor premises as appropriate, and at site in Kochi. The location of the Kochi Metro Rail Project Contractor's, sub-contractor's and other designated project contractor's premises will be intimated to the RAMS Consultancy as soon as they are known and transmitted by the Kochi Metro Rail Project Contractor.

7. Documentation

7.1. As per Scope at 5 Above

8. Deliverables

8.1. Preliminary Design

As per Scope at 5 above

8.2. Detailed Design for RAMS

As per Scope at 5 above

8.3. Successful Submission report for RAMS model for Reach R1

As per Scope at 5 above

8.4. Successful Submission report for RAMS model for Reach R2 and combined R1-R2 Integration

As per Scope at 5 above

8.5. Defect Liability Period

As per Scope at 5 above

8.6. Operating Procedures

As per Scope at 5 above

9. Services and Information

All services and information to be provided by the **RAMS** Consultant to the Employer is free of copyright or any other encumbrance for future use by the Employer in the design, construction and operation of the Metro and any other railway.

CONTRACT AGREEMENT

This Contract is made at Kochi on day of by and between:

- (1) Kochi Metro Rail Limited, represented by the General Manager (S&T), whose office is located at 8th Floor, Revenue Tower, Park Avenue, Kochi – 682011, Kerala, India hereinafter referred to as the “KMRL” or the “Employer”, as the case may be, of the one part, and;
- (2) The Consortium comprising of:
 - a) a company registered and existing under the laws of with head office located at represented by Mr. and Mr. Authorised to sign and bind the company under the power of attorney dated..... And board Resolution dated (Note5)
 - b) a company registered and existing under the laws of with head office located at represented by Mr. and Mr. Authorised to sign and bind the company under the power of attorney dated..... And board Resolution dated (Note5).
 - c) a company registered and existing under the laws of with head office located at represented by Mr. and Mr. Authorised to sign and bind the company under the power of attorney dated..... And board Resolution dated (Note5).

(Note2) Who shall be jointly and severally liable for the undertaking of this Contract, hereinafter

(Note3) collectively referred to as the “Contractor” of the other part.

WHEREAS the Contractor has established a consortium in accordance with Indian law and offered a tender for RAMS Consultancy for Kochi Metro Rail Projects and agrees to undertake performance of such services under the terms and conditions set forth in this Contract.

Both parties hereby agree as follows:

Clause 1

KMRL agrees to hire and the Contractor agrees to be hired for RAMS Consultancy for Kochi Metro Rail Projects under the terms and conditions specified in this Contract Agreement and the other Contract Documents attached hereto as. The order of preference of these documents is as follows:

- i. Letter of Acceptance
- ii. Form of Agreement
- iii. Special Conditions of Contract
- iv. General Conditions of Contract
- v. The Schedules
- vi. Employer’s Requirements
- vii. Contractor’s Proposal
- viii. Any other documents forming part of the Contract

All of the foregoing documents, together with this Contract Agreement, are referred to herein as the Contract Documents. Also incorporated into these Contract Documents, and made part hereof, are all codes, standard specifications, and similar requirements that are referred to therein. In the event of a conflict, ambiguity or discrepancy between the contents of the Contract Documents, the contractor will seek clarification from the Employer, whose decision shall be final.

Clause 2 Obligation of the Contractor:

The Contractor agrees, subject to the terms and conditions of the Contract Documents, to perform efficiently and faithfully all of the services for RAMS Consultancy for Kochi Metro Rail Projects and in carrying out all duties and obligations imposed by the Contract Documents.

Clause 3 Obligation of the Employer:

The Employer agrees, subject to the terms and conditions of the Contract Documents, to pay the Contractor the amount specified, and at the rates and terms and in the manner set forth in the Contract Documents.

Clause 4 Value of Work and Completion Time:

The Employer agrees to pay for the total cost of the Works and the Contractor agrees to accept the sums mentioned below in the following currencies, to be the total cost for the Work carried out by him as part of his obligations, responsibilities and liabilities under and according to the provisions and obligations imposed on him by the Contract.

Total Fixed Lump Sum Price

- (i) In Rupees (___Rs) ;and
- (ii) In Foreign Currency of: ()

The above amounts include all taxes, duties, levies, cess and any other charges leviable, and tax to be deducted at source.

The Contractor shall complete The services within (_____) week from the date stipulated in the letter of acceptance, issue by the Employer .

Clause 5 Notices:

All notices called for by the terms of the Contract Documents shall be in writing in the English language and shall be delivered by hand or by registered mail, acknowledgement due, to the parties' addresses given below. All notices shall be deemed to be duly made when received by the party to whom it is addressed at the following addresses or such other addresses as such party may subsequently notify to the other:

Employer

Kochi Metro Rail Limited,
8th Floor, Revenue Tower,
Park Avenue, Kochi – 682011, Kerala, India

Consultant

Clause 6 Obligation of tax law

- a) The contractor shall ensure full compliance with tax laws of India with regard to this contract and shall be solely responsible for the same. He shall submit copies of acknowledgement evidencing filling of returns every year and shall keep the employer fully indemnified against liability of tax, interest, penalty, etc. of the contractor in respect thereof which may arise.
- b) The contractor should obtain necessary certificate from the assessing officer, under the relevant provisions of the income Tax act of India, for the rate at which income tax is to be deducted from the payments to be made to him. Pending submission of such certificate, KMRL will deduct income tax at source as per applicable provisions under the income Tax act. The contractor may, therefore, submit the certificate before the advance payment becomes due.

Clause 7 Integration:

The Employer and the Contractor agree that this Contract Agreement, together with the other Contract Documents, expresses all of the agreements, understandings, promises, and covenants of the parties, and that integrates, combines, and supersedes all prior and contemporaneous negotiations, understandings, and agreements, whether written or oral and that no modification or alteration of the Contract Documents shall be valid or binding on either party, unless expressed in writing and executed with the same formality as this Contract Agreement, except as may otherwise be specifically provided in the Contract Documents.

Clause 8 Governing Law

This Contract is enforceable and construed under the laws of the Republic of India.

Clause 9 Language

This Contract Agreement and the other Contract Documents are made in the English language. Three copies of the contract document shall be prepared.

Clause 10 Jurisdiction of court

Courts at Kochi shall have the exclusive jurisdiction to try all the disputes arising out of this agreement. **This Contract** is made in three copies with identical wording. Both parties having thoroughly read and understood the contents hereof sign their names and affix the seal (if any) in the presence of witness and each shall retain one copy.

KMRL, The Employer

Kochi Metro Rail Limited

The Consultant

Name of Consultant

WITNESS

Appendix I: Form 1 – Letter of Proposal Submission

Date:

To:

**The General Manager (S&T)
Kochi Metro Rail Limited
8th Floor, Revenue Tower,
Park Avenue, Kochi – 682011, Kerala**

**Sub: RAMS consultant for Kochi Metro Rail Project for Aluva to Petta corridor, Tender No.
KMRL/RAMS/04/2015**

GENTLEMEN,

1. Having inspected, examined the Employer's Requirements, General Conditions of Contract, Special Conditions of Contract and Instruction to Tenderers including Pricing Document, and addenda thereto (if any) issued by the KMRL for RAMS Consultancy for Kochi Metro Rail Projects , and the matters set out in Appendix 1 hereto, and having completed and prepared Appendices 2, 3, 4, 5, 6 7, 8, 9, 10 and 11 hereto and visited the site as required, we hereby [jointly and severally]* offer for RAMS Consultancy in conformity with the above documents for the sum stated in the Pricing Document as completed by us and appended hereto.
2. We undertake [jointly and severally]* to complete and deliver the whole of the Works and achieve all Stages, within the times stated in Appendix B (Annexure 1 to ITT).
3. We undertake [jointly and severally]*:
 - a. to keep this Tender open for acceptance without unilaterally varying or amending its terms for the period stated in Notice of Invitation to Tender hereto [(the withdrawal of any member or any other change in the composition of the partnership/joint venture/consortium on whose behalf this Tender is submitted shall constitute a breach of this undertaking)]*; and
 - b. if this Tender is accepted, to provide Guarantees, Undertakings & Warranties for the due performance of the Contract as stipulated in the General Conditions of Contract, Special Conditions of Contract and Appendix 1 hereto; and
 - c. to hold in confidence all documents and information whether technical or commercial supplied to us at any time by or on behalf of the KMRL in connection with this Tenderer with the above-mentioned Works and, without your written authority or as otherwise required by law, not to publish or otherwise disclose the same.
4. We submit with this Tender a duly executed Tender Guarantee in respect of our obligations under this Tender.
5. Unless and until a formal agreement is prepared and executed, this Tender together with your written acceptance thereof, shall constitute a binding contract between us.
6. We understand that you are not bound to accept the tender.

7. We declare that the submission of this Tender confirms that no agent, middleman or any intermediary has been, or will be engaged to provide any services, or any other item or 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 tender price does not include any such amount. We acknowledge the right of the Employer, if he finds to the contrary, to declare our Tender to be non-compliant and if the Contract has been awarded to declare the Contract null and void.
8. This Tender shall be governed by and construed in all respects according to the laws for the time being in force in India.

Yours faithfully,

Signature:

Witness: Date

Signature: Name

Date For and on behalf of

Name Address

Address

Signature:

Witness: Date.....

Signature: Name

Date For and on behalf of

Name Address

Address

* Note: If the Tenderer comprises a partnership, joint venture or consortium.

Appendix I: Form 2 – Contract Conditions

1.	Amount of Performance Guarantee (ITT Clause 9)	10% of the Contract Price in types and proposition of currencies in which the contract price is payable.
2.	Amount of Tender Security	Rs. Five lakh or equivalent amount in a single freely convertible foreign currency.
3.	Latest date for commencement of the Works	Date of Issue of Letter of Acceptance issued by Employer.
4.	Liquidated Damages	0.05% of the total amount apportioned to the milestone relevant of Key Dates as per Appendix B to Annexure 1 of ITT per week of delay. Maximum limit of liquidated damages shall be 10% of the fixed lump sum price accepted for whole of the works.
5.	Liability Period Works	Refer SCC clause 3.
6.	Value of Tenderers Professional Indemnity Insurance (SCC clause 10)	**
7.	Period in which all insurance have to be effected (SCC clause 10)	**
8.	Tenderers Name and Address	**
9.	Employer's Name and Address	Kochi Metro Rail Limited 8 th Floor, Revenue Tower, Park Avenue, Kochi – 682011, Kerala

** (Tenderer to Complete)

Appendix I: Form 3 – Project Experience Sheet

Assignment Name:		Country:
Location within Country:		Professional Staff Provided by Your Firm/Entity(profiles):
Name of Client:		Nº of Staff:
Address:		Nº of Staff-Months; Duration of Assignment:
Start Date (Month/Year):	Completion Date (Month/Year):	Approx. Value of Services (in Current US\$):
Name of Associated Consultants, If Any:		Nº of Months of Professional Staff Provided by Associated Consultants:
Name of Senior Staff (Project Director/Coordinator, Team Leader) Involved and Functions Performed:		
Narrative Description of Project:		
Description of Actual Services Provided by Your Staff:		

Note:

- i. Use separate sheet for each project.
- ii. Each project sheet shall be accompanied by a Client Certificate.

Appendix I: Form 4 – Project Experience Summary

Name of Project and Name of Client *1	Details of RAMS Audit and Assessment Activities **2	Length of Project (km)	Commencement and Completion Dates	System Details ***3

Notes:

- *1 Only Metro Railways projects to be shown. Client name to be included.
- **2 Only RAMS audit and assessment activities and Operational related works. Brief description and cost of Services and details of specific tasks undertaken, including staffing and man-months.
- ***3 Name of system, country of origin, specify details of type of system, i.e. Rolling Stock, Signaling & Telecommunication, Traction, SCADA, Depot facilities, Track etc. interfacing details, and any other pertinent information.

Appendix I: Form 5 – CV of Key Expert

1. Name of the Tenderer:
2. Proposed Role in the Assignment:
3. Personal Details of Personnel

Name of Personnel

Date of Birth

Nationality

**Educational
Qualification**

Employment Record

From	To	Name of Employer	Position Held

4. Project related experience of Personnel

Sr. No.	Name of Project	Estimated capital cost of project (in Rs Cr / US \$ mn)	Name of firm for which the key personnel worked	Designation of the key personnel on the project	Date of completion of project assignment	Man days spent
1.						
2.						
3.						
4.						
5.						
6.						

5. Certification

I hereby confirm that I am willing to work on the Project and I will be available for entire duration / listed man months of the Project assignment, as required.

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes me, my qualifications and my experience.

(Signature and name of the Key Professional)

Place:

(Signature and name of the Authorised Signatory of the Tenderer)

Appendix I: Form 6 – Financial Capacity

Refer Clause 6.2.5 (vi)

Sr. No	Description	Financial Data for Latest Last 3 Years (Indian Rupees in crores)		
		2011 – 2012	2012 – 2013	2013 – 2014
1.	Total Assets			
2.	Current Assets			
3.	Total External Liabilities			
4.	Current Liabilities			
5.	Annual Profits Before Taxes			
6.	Annual Profits After Taxes			
7.	Net Worth = [1 – 3]			
8.	Liquidity = [2 – 4]			
9.	Return On Equity			
10.	Annual Turnover (From Consultancy Works)			
11.	Gross Annual Turnover			

Notes:

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

1. Separate Performa shall be used for each member in case of JV/Consortium.
2. All such documents reflect the financial data of the Tenderer or member in case of JV, and not sister or Parent Company.
3. Historic financial statements shall be audited by certified accountant / Statutory Auditor of the Company under their seal & stamp and shall be strictly based on Audited Annual Financial results of the relevant period(s). No statements for partial periods will be accepted.
4. Historic financial statements must be complete, including all notes to the financial statements.

Foreign applicants, in whose country calendar year is also the financial year, may submit all relevant data for the last 3 years i.e. 2011, 2012 and 2013.

Appendix I: Form 7 – Outline Project Management Plan

The Tenderer shall submit with his Tender an Outline Project Management Plan as prescribed in Employer's Requirement -inter-alia including names, qualifications, professional experience and corporate affiliation of all proposed key management and engineering personnel (above the level of supervisor) and specialists, for conducting the RAMS audit and for review of Operation philosophy.

Appendix I: Form 8 – Structure of the Tenderer

The Tenderer shall supply a chart particularizing the structure of the Tenderer (identifying all companies comprising the Tenderer in the event that the Tenderer is a joint venture, partnership or consortium) and the ownership of each of the companies comprising the Tenderer, identifying all respective intermediate and ultimate holding companies.

COMPOSITION OF THE TENDERER

1. A copy of any Memorandum of Understanding (MOU) relating to the composition of the Tenderer shall be submitted. For guidance, if the Tenderer is a joint venture, consortium or a partnership then the joint venture, consortium or partnership agreement is to be submitted by the Tenderer. Should the Tenderer be an entity established or to be established to tender for this Contract, details of the shareholders' agreement or proposed shareholders' agreement shall be supplied together with the percentage participation and percentage equity in the agreements. Where the Tenderer comprises a partnership, consortium or joint venture, the Tenderer shall submit the information referred to in Para 1.4 to 1.7 of Instructions to Tenderer.
2. The contractual arrangements and copies of agreements in relation thereto must, as a minimum, provide information on all members or participants involved, their respective participation in the Tenderer, the management structure, ownership and control of the members or participants comprising the Tenderer and if, appropriate, the name of the member or participant who would have overall lead management responsibility for the Works, the registered addresses of all parties and the names of their respective senior partners, chairmen or managing directors as appropriate. Such agreements should also reflect the joint and several liabilities of the members to the Employer in the event that the Contract is awarded to them and provide "deadlock" provisions in the event that decisions of the joint venture, consortium or partnership cannot be reached by unanimous agreement.
3. The Tenderer shall provide written confirmation that:
 - a. The agreement or agreements submitted represent the entire agreement between the members or participants comprising the Tenderer as to the Tenderer's legal persona;
 - b. There is or are no other agreements relating to the Tenderer's incorporation, powers or organization which may affect in any way his ability to carry out the Works; and
 - c. No changes will be made to any such agreements during the tender period without first obtaining the Employer's agreement to the proposed change or changes.

Appendix I: Form 9 – Tender Index

The Tenderer shall include with his Tender an index (as per clause 3.9 of ITT) which cross refers all of the employer's tender requirement elaborated in these document to all the individual section within Tender package 1: Technical package and Tender package 2: Financial package which the Tenderer intends to be the response to each and every one of those requirements.

Appendix I: Form 10 – Minimum Eligibility Criteria

(Refer Clause 3 of ITT)

Name of Applicant:

Eligibility criteria for RAMS Consultant

Sl. No	Criteria	Yes	No
1	Does the applicant firm has at least 5 years' experience in RAMS Consultancy field?		
2	Does the applicant firm has experience in General / Project Consultancy work pertaining to medium or large Metro System involving the work of framing specifications, checking designs, supervision including inspection, RAMS and quality, testing and commissioning of successful RAMS model for system?		
3	Does the applicant has completed successfully at least one Metro Rail Project's RAMS analysis and demonstration of RAMS model?		

Eligibility criteria for RAMS Expert: *

Sl. No	Criteria	Yes	No
1	Does RAMS expert has 15 years of minimum experience in Railway /Metro Rail environment		
2	Does RAMS experts has experience on System Assurance, Functional Safety, Quality Assurance, Systems Engineering on Rail based Transportation Systems		
3	Has RAMS expert well versed in the EN 50126 Standards and its application on Rail based Transportation Systems		
4	Does RAMS experts has adequate knowledge in the FMECA, FEA, Verification & Validation and FTA on various Rail based Transportation Systems		

Eligibility criteria for Operations Expert: *

Sl. No	Criteria	Yes	No
1	Does Operational expert has 15 years of minimum experience in Railway /Metro Rail environment		
2	Does the Operational Expert has working experience of minimum two metro environment, and out of that one should be of foreign metro?		

1. In case of JV/ consortium, each member individually.

#All the Answers should be with supporting documents signed and self-certification for its correctness.

*A 'NO' to any of the questions will disqualify the applicant.

*The applicant should submit supporting documents/certificates along with Resume for all the items mentioned above

*A self-undertaking that the details provided are true and correct is also to be submitted.

Appendix I: Form 11 – Approach and Methodology

The Tenderer shall submit a detailed write up of the Approach and Methodology under the following heads:

1. PROPOSED RAMS AUDIT AND ASSESSMENT PLAN
2. METHODOLOGY AND IMPLEMENTATION PLAN
3. OPERATIONS & MAINTENANCE PHILOSOPHY

Appendix I: Form 12 – Copyright Undertaking

Dated:

To

The General Manager(S&T)
Kochi Metro Rail Limited,
8th Floor, Revenue Tower,
Park Avenue, Kochi 682011

**Sub: Reliability Availability Maintainability & Safety Consultancy for Kochi Metro Rail Projects,
Tender No. KMRL/RAMS/04/2015**

We, (name of individual Tenderer/Joint venture/Consortia), hereby undertake that the Tender drawings and the Tender documents purchased as a necessary part of our preparation of this Tender shall be used solely for the preparation of the Tender and that if the Tender is successful, shall be used solely for **Reliability, Availability Maintainability & Safety consultancy** for Kochi Metro Rail Project.

We further undertake that the aforesaid Tender drawings (if any) and documents shall not be used in whole, in part or in any altered form on any other project, scheme, design or proposal that the individual Tenderer/Consortium/Joint venture, their parent companies or sub Consultants of the individual Tenderer/Consortium/Joint venture are, or will be involved with either in India or any other country.

Signed

For and on behalf of

(Name of Tenderer/Joint venture/Consortia)

Appendix I: Form 13 – Certificate Confirming Receipt of All Tender Addenda

This is to certify that we, M/S [* Name of the Company] have received all Addenda of this Tender as listed below: :

1. Addendum No.

2.

3.

4.

.

.

.

SIGNATURE OF TENDERER

* In case of a partnership, joint venture or consortium, to be submitted by each constituent member.

Appendix I: Form 14 – Statement of Deviation

Clause Number	Details of Deviations	Remarks explaining reasons for deviations and why it may be considered by the employer

Note:

1. We hereby confirm that the pricing for unconditional withdrawal of the above deviations has been given in the financial bid.
2. We hereby confirm that all implicit and explicit deviations, comments and remarks mentioned elsewhere in our proposal shall be treated as NULL and VOID and stand withdrawn.
3. We hereby confirm that but for the deviations noted in this Appendix 11, our proposal is fully and truly compliant.
4. We hereby confirm that all implicit and explicit deviations, comments and remarks mentioned in this Appendix11 but are not priced in Annexure F to ITT for its unqualified withdrawal, shall be treated as NULL and VOID and stand withdrawn.

SIGNATURE OF TENDERER

Appendix I: Form 15 – Form of Bank Guarantee for Performance Guarantee

(Reference Clause 3.2 of GCC)

(To be stamped in accordance with the Stamp Act of the Country of Issuing Bank)

To:

**Kochi Metro Rail Limited,
8th Floor, Revenue Tower, Park Avenue,
Kochi 682011, Kerala, India**

WHEREAS (Name and address of Tenderer) (hereinafter called “the RAMS Consultant”) has undertaken, in pursuance of Tender No. KMRL/RAMS/04/2015 dated _____ to execute the Reliability Accessibility Maintainability & Safety Consultancy for Kochi Metro Rail Project of Kochi – Aluva to Petta corridor (hereafter called “Contract”).

AND WHEREAS it has been stipulated in the said Contract that the RAMS Consultant shall furnish a Bank Guarantee by a Scheduled Indian Bank located in India for the sum specified herein as security for compliance with their obligations in accordance with the Contract in lieu of cash deposits held by you for such compliance of obligations/performance Guarantee.

AND WHEREAS we (Name of the Bank with address) have agreed to give the RAMS Consultant such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the RAMS Consultant up to a total of **(amount of Guarantee) (in words)**, such sum being payable in Indian Rupees, and we hereby unconditionally, irrevocably and without demur undertake to immediately pay you, upon your first written demand and without cavil or argument any sum or sums within the limits of (amount of guarantee) as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the RAMS Consultant before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the services to be performed thereunder or of any of the contract documents which may be made between you and the RAMS Consultant shall in any way release us from any liability under the guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid up to 90 days after the expiry of defect liability period for whole of the work. The pendency of any dispute or arbitration or other proceedings shall not affect this guarantee in any manner.

SIGNATURE AND SEAL OF THE GUARANTOR

NAME OF BANK

ADDRESS

DATE

Notes:

1. The stamp papers of appropriate value shall be purchased in the name of the Bank, who shall issue the 'Bank Guarantee'.
2. The 'Bank Guarantee' shall be issued by a Scheduled Bank located in India, acceptable to Employer.

Appendix I: Form 16 – Form of Bank Guarantee for Tender Security

(Reference Clause 8.2 of the Instructions to Tenderers)

(To be stamped in accordance with Stamp Act of India)

KNOW ALL MEN by these presents that we _____ (Name of Bank), having our registered office at _____ (hereinafter called "the Bank") are bound unto KOCHI METRO RAIL LIMITED (hereinafter called "the Employer") in sum of **INR 500,000 (Rupees Five Lakh)*** for which payment well and truly to be made to the said Employer, the Bank binds himself, his successors and assigns by these presents.

WHEREAS _____ (Name of Tenderer) (hereinafter called "the Tenderer") has submitted his tender dated _____ for the Contract of RAMS Consultant for Kochi Metro Rail Project Aluva – Petta Corridor, Kochi, (hereinafter called "the Tender").

WHEREAS the Tenderer is required to furnish a Bank Guarantee for the sum of * (Amount in figures and words) as Tender Guarantee against the Tenderer's offer as aforesaid.

AND WHEREAS _____ (Name of Bank and address) have, at the request of the Tenderer, agreed to give this guarantee as hereinafter contained.

We further agree as follows:

- (i) That the Employer may without affecting this guarantee grant time or other indulgence to or negotiate further with the Tenderer in regard to the conditions contained in the said tender and thereby modify these conditions or add thereto any further conditions as may be mutually agreed upon between the Employer and the Tenderer.
- (ii) That the guarantee herein before contained shall not be affected by any change in constitution of our Bank or in the constitution of the Tenderer.
- (iii) That any account settled between the Employer and the Tenderer shall be conclusive evidence against us of the amount due hereunder and shall not be questioned by us.
- (iv) That this guarantee commences from the date hereof and shall remain in force till :
 - a. The Tenderer in case his tender is accepted by the Employer, executes a formal agreement after furnishing the Performance Guarantee on a scheduled Indian Bank located in India acceptable to the Employer
 - b. 28 days beyond the Tender Validity period of 180 days from the last date of submission of the tender, this shall be suitably extended on the request of KMRL.
 - c. That the expression "the Tenderer" and "the Bank" herein used shall, unless such an interpretation is repugnant to the subject or context, include their respective successors and assigns.

THE CONDITIONS of this obligation are:

- (i) if the Tenderer withdraws his Tender during the period of Tender validity specified in the Form of Tender, or
- (ii) if the Tenderer having been notified of the acceptance of his Tender by the Employer during the period of tender validity:
 - a. fails or refuses to furnish the Performance Guarantee and/or
 - b. fails or refuses to enter into a Contract within the time limit specified in Clause 12.2 of the "Instructions to Tenderers".

We undertake to pay to the Employer the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand provided that in his demand the Employer will note that the amount claimed by him is due to him owing to the occurrence of any one or more of the conditions (I) & (ii), mentioned above, specifying the occurred condition or conditions.

Signature of

Authorised Official

Of the Bank:

SIGNATURE OF WITNESS

Name of Official:
Designation

NAME OF WITNESS

STAMP/SEAL OF BANK

Address of witness

**The currency of the amount shall be in Rupees or equivalent amount in a single freely convertible foreign currency.*

Appendix I: Form 17 – Pricing Document

Form 17A – Tender Total

- 1. The fixed Lump Sum price of the Contract for the RAMS Planning portion that includes items 8.1 to 8.5 of the Scope of Services is:**

Rupees (In figures) (In words) and / or (Strike out which is not applicable) (In foreign currencies) (In figures) (In words)

- 2. The estimated price for the Operations Procedures and Manual portion of the study as described in Items 8.6 of the Scope of Services is:**

Rupees (In figures) (In words) and / or (Strike out which is not applicable) (In foreign currencies) (In figures) (In words)

This sum is an estimate only and will be paid on a monthly basis depending on the deployment of staff every month. The rates for this will be as per Form 17C – Rate Per Man Month.

Note:

“and” means in addition to Rupees.

“or” means either in Rupees or in Foreign Currency.

Form 17B – Schedule of Payments and Milestones

KMRL shall make payments to the RAMS based on the stage payments as shown below. The stage payments shall be made on completion of the corresponding activities after necessary deductions. The percentages shown will be made for each activity based on the amount quoted in each currency.

Sr. No.	Activity completed	Reference clause as per Scope of Services/ Deliverables	Stage of payment of Lump Sum	Progress schedule (weeks from date of LoA)
	B	C	D	E
1.	Preliminary design for RAMS Plan	8.1	15 %	
2.	Detailed submission RAMS plan	8.2	15%	
3.	Successful submission report & RAMS model for reach R1	8.3	30%	
4.	Successful submission RAMS report & RAMS model for reach R2 and combined R1-R2 integration	8.4	25%	
5.	RAMS demonstration during the Defect Liability Period.	8.5	15%	
6.	Drafting operating procedures	8.6	Note 3	

Note: 1. The progress schedule (weeks from letter of Acceptance) will be finalized during contract execution

2. The percentages shown will be made for each activity based on the amount quoted in each currency.

3. The payment for Item 6 will be made as per the agreed man-month rates on a monthly basis.

Form 17C – Rate per Man Month

Rate per man month of each category of staff deployed and their details:

The tenderer shall submit the rate per man month of each key staff and other staff member and their category in the format given below.

Sr. No.	Name of Staff	Designation	Rate per Man Month
1		RAMS Expert	
2		Operations Expert	
3			

Tenderer may add any other position other than the RAMS Expert or Operation Expert of Appendix 7.

Form 17D – Pricing of Unqualified withdrawal of Conditions, Qualifications, Deviations etc.

Item	Condition, Qualification, Deviation	Activity affected by each condition, qualification, Deviation etc.	Increase or Decrease for unqualified withdrawal of each condition, qualification, deviation etc.	
			Foreign Currency	Rupee Portion
Total				

Notes:

1. In this Appendix, the Tenderer shall indicate every key date that will be affected by each remark, comment, condition, qualification or deviation, etc. that has been specified in Appendix FT-11 and prices for unqualified withdrawal of which has been quoted in this Appendix.
2. In case price for unqualified withdrawal of any remark, comment, condition, qualification or deviation etc. indicated in Appendix FT-11 is not quoted in this Appendix, it shall be considered that the remark, comment, condition, qualification or deviation is unconditionally withdrawn without any financial implication.
3. Where there are no deviations, the statement should be returned duly signed with an endorsement indicating 'No Deviations'.
4. The tenderer shall indicate price adjustment against each deviation, condition, qualification, reservation, etc. that he shall like to add to the tender price for withdrawing his deviations, conditions, qualifications, reservations, etc. if the same are unacceptable to the Employer.

SIGNATURE OF TENDERER

Annexure I to Instructions to Tenderer

Instruction for completing the pricing document

A. General Requirements

1. This contract is a fixed Lump sum priced contract for Reliability Availability Maintainability & Safety Consultancy for Kochi Metro Rail Project for Kochi, Aluva to Petta Corridor. The price to be quoted shall be inclusive of all taxes, levies, duties and any other charges that may be levied, including tax deducted at source. The contractor shall be solely responsible for payment of all custom duties, custom clearances, post handling charges if any, etc., of all the imports.

B. Tender total

1. The tender total submitted by the tenderer shall be in the format shown in the pricing document.
2. The pricing document completed and submitted by the tenderer, as part of his tender, should use an indexing and page numbering system such that its extent and completeness is clearly evident.

C. Currency

1. The Lump sum price shall be indicated in Indian rupees and / or in a foreign currency wherever required. (Refer to clause 6.8 of ITT)

D. Rate per man month

1. The tenderer shall submit the Rate per man month of each key staff and other staff member and their category as per the format in Appendix I: Form 17.

Annexure II – Detailed Evaluation Sheet

EVALUATION OF TECHNICAL BID

(A) Criteria for marks for the Eligible Assignments of the Tenderers (TOTAL MARKS: 35)

1. Criteria for minimum EAs: Full 70% of the 60% marks will be given for those Applicants which have met the requirement of minimum number 2 eligible assignments i.e., 14.7 marks.
2. Criteria for additional EAs: : Full 30% of the 60% marks i.e. 6.3 will be given to those Applicants which have X or more additional EAs (i.e. a total of X+2 or more EAs). Rest of the Applicants will be allotted marks proportionately, on a linear scale, keeping X EAs as upper limit.
3. Criteria for Size: Full 50% of 40% of the Total marks i.e. 7 marks will be given to those Applicants which have done one EA for a length of 25 Km or more (For each Applicants only maximum length of the EAs will be considered). Rest of the Applicants will be allotted marks proportionately based on the project with longest length, on a linear scale, keeping length of 25 Km as upper limit.
4. Criteria for Turnover: Full 50% of 40% of the Total marks i.e. 7 marks will be given to those Applicants which average annual revenue from consultancy business for the last three years preceding the proposal due date (As per Form – 6 of Appendix-I) equal to INR 5000 Million or more. Rest of the Applicants will be allotted marks proportionately, on a linear scale, keeping the figure INR 5000 Million as upper limit.

Marking Sheet 1 Details of Eligible Assignments of the Tenderers

Name of the Tenderer	Total EAs (Required Min EA=1)	Additional EAs	Maximum Length of EAs (Km)	Annual revenue from consultancy business (INR Million)
Tenderer 1				
Tenderer 2				
Tenderer 3...				

Marking Sheet 2 Marks for the Eligible Assignments of the Tenderers

			Tenderer 1	Tenderer 2	Tenderer 3...
Marks for	%age breakup of marks	Max. Marks	Allotted Marks	Allotted Marks	Allotted Marks
Min. EAs	70% of 60% of Total Marks	14.7			
Addl. EAs	30% of 60% of Total Marks	6.3			
Total Marks for EAs (60% of Total Marks)		21.0			

Size	50% of 40% of Total Marks	7.0			
Annual revenue from consultancy business (INR Million)	50% of 40% of Total Marks	7.0			
Total Marks for Size and revenue (40% of Total Marks)		14.0			
Total (1+2)		35.0			

(B) Criteria for marks for the Eligible Assignments of the Key Experts

1. Criteria for minimum EAs: Full 70% of the 60% of total marks allowed to each key expert as per Clause-11 will be given for those key experts who have met the requirement of minimum number of Eligible Assignments.
2. Criteria for additional EAs: Full 30% of the 60% of total marks will be given to those key experts who have done additional EAs indicated as upper limit against each of them in Table- Marking Sheet-3 or more. Rest of the Key Experts will be allotted marks proportionately, on a linear scale, keeping EAs as upper limit as indicated against each of them in Marking Sheet-3.
3. Criteria for Size: Full 50% of the 40% of the total marks will be given to those key experts (separately of each type) who have done EAs for a length indicated as upper limit against each of them in Marking Sheet-3 or more. Rest of the key experts (separately of each type) will be allotted marks proportionately, on a linear scale, keeping length of EA as upper limit as indicated against each of them in Marking Sheet-3.
4. Criteria for Professional Experience: Full 50% of the 40% of the total marks will be given to those key experts (separately of each type) who have Profession Experience indicated as upper limit against each of them in Marking Sheet-3 or more. Rest of the key experts (separately of each type) will be allotted marks proportionately, on a linear scale, keeping Professional Experience as upper limit as indicated against each of them in Marking Sheet-3.

**Marking Sheet 3
Marks for the Eligible Assignments of the Key Experts**

	Marks for	%age breakup of marks	Max. Marks	Nos.	Allotted Marks
RAMS Expert Max. Marks=20 Min. EAs required=2 Upper Limit for Max EAs for proportionate marking for addl. EAs=3. (Total EAs=5) Upper Limit for Max Length of EAs for proportionate marking for size=25 Km Upper Limit for Max Professional Experience for proportionate marking for Professional Experience =25 years	Min. EAs	70% of 60% of Total Marks	8.4		
	Addl. EAs	30% of 60% of Total Marks	3.6		
	Size (Km)	50% of 40% of Total Marks	4		
	Professional Experience (Years)	50% of 40% of Total Marks	4		
	Total		20		

	Marks for	%age breakup of marks	Max. Marks	Nos.	Allotted Marks
Operations Expert Max. Marks=20 Min. EAs required=2 Upper Limit for Max EAs for proportionate marking for addl. EAs=3. (Total EAs=5) Upper Limit for Max Length of EAs for proportionate marking for size=25 Km Upper Limit for Max Professional Experience for proportionate marking for Professional Experience =25 years	Min. EAs	70% of 60% of Total Marks	8.4		
	Addl. EAs	30% of 60% of Total Marks	3.6		
	Size (Km)	50% of 40% of Total Marks	4		
	Professional Experience (Years)	50% of 40% of Total Marks	4		
	Total		20		

Marking Sheet 4
Summary of Marks

	Marks of the Key Experts	Marks of the Tenderer	Marks for Methodology and work plan	Total
Max. Marks	40	35	25	100
Tenderer 1				
Tenderer 2				
Tenderer 3...				

OVERALL MARKING
Combined and Final Evaluation

Formula: $S = S_T \times T_w + S_F \times F_w$; where $T_w=0.8$ and $F_w=0.2$

Name of the Tenderer	S_T	F_m	F	S_F	S
Tenderer 1					
Tenderer 2					
Tenderer 3...					

Annexure III – Key Dates

To be filled by KMRL

Key Dates

Sr. No.	Key Milestone	Expected Key Date (from LOA)
1.	Preliminary design for RAMS Plan	8 weeks
2.	Detailed submission RAMS plan	15 weeks
3.	Successful submission report & RAMS model for reach R1	20 weeks
4.	Successful submission RAMS report & RAMS model for reach R2 and combined R1-R2 integration	25 weeks
5.	RAMS demonstration during the Defect Liability Period	
6.	Drafting operating procedures/Manuals	35 weeks

General Conditions of the Contract

1. Definitions

The following words and expressions shall have the meanings assigned to them except where the context otherwise requires:

- (i) "Agreement" means the Conditions of Agreement (General Conditions of Contract and Special Conditions of Contract) together with Scope of Services, Standard Pro-forma, Letter of Acceptance and Formal Agreement, Remuneration and Payment.
- (ii) "Applicable Law" means the laws and any other instruments having the force of law in India, as they may be issued and in force from time to time.
- (iii) "Approved/approval" means the approval in writing.
- (iv) "Contract" means the Contract signed by the Parties, to which these General Conditions of Contract are attached, together with all the documents listed in letter of award.
- (v) "Applicant/Tenderer/Bidder" means any entity or person that may provide or provides the Services to the Employer under this Contract.
- (vi) "Day" means the period between any one midnight and the next.
- (vii) "Employer/Engineer" means the KOCHI METRO RAIL LIMITED (also referred to as KMRL) which expression shall also include their legal successors and permitted assigns.
- (viii) "General Consultancy" means General Consultancy appointed by KMRL.
- (ix) "Effective Date" means the date on which this Contract comes into force.
- (x) "Foreign Personnel" mean such persons who at the time of being so hired had their domicile outside India.
- (xi) "Reliability Availability Maintainability & Safety (RAMS) Consultancy means the Applicant/Tenderer/Bidder named in the Agreement, who has been awarded the contract & entered into agreement, and which expression shall include his/their legal successors and permitted assigns.
- (xii) "Local Personnel" mean such persons who at the time of being so hired had their domicile inside India.
- (xiii) "Month" means a period of one month according to the Gregorian calendar commencing with any day of the month.
- (xiv) "Party" means KMRL or RAMS Consultancy as the case maybe and "parties" means both of them.
- (xv) "Project" means the project named in Special Conditions of Contract.
- (xvi) "Personnel" means persons hired by the Consultancy as employees and assigned to the performance of the Services or any part thereof;
- (xvii) "Proposal/Package/Tender" means the Technical Proposal/Packages/Tender and the Financial Proposal/packages/Tender as the context so requires.

- (xviii) "Rupees" means the currency of India, and shall be the currency used for the Project.
- (xix) "Services" means the work to be performed by the Consultants pursuant to this Contract for the purposes of the Project, as described in Tender document hereto.
- (xx) "Third Party" means any person or entity other than the Government, the Employer or the Consultants.
- (xxi) "System Contract/System Contractor" means all the system contract that comes under the System Directorate of the Kochi Metro Project (RS, S&T, E&M, Traction, SCADA, Depot Facilities, Track etc.)

2. Interpretation

- (i) The headings shall not limit, alter or affect the meaning of this Contract and in the Agreement shall not be used in its interpretation.
- (ii) The singular includes the plural, the masculine includes the feminine, and vice-versa where the context requires.
- (iii) If there is a conflict between provisions of the Agreement, the last to be written chronologically shall prevail, unless otherwise specified in Conditions of Contract.

3. Obligations of RAMS Consultant

3.1. Scope of Services to be performed by the RAMS Consultant:

- (i) It shall perform Services related to the Scope of Services as stated in the section Scope of Services.
- (ii) It shall exercise reasonable skill, care and diligence in the performance of his obligations under the Agreement.
- (iii) Where the Services include the co-ordination between the RAMS Consultant and other Consultants and contractors employed on the Project, KMRL shall provide such co-ordination with RAMS and System Contractor.

3.2. Performance Guarantee

As stated in the 'Instructions to Tenderers' the RAMS Consultancy shall provide KMRL with a Performance Guarantee in the form of Bank Guarantee provided by a/s any scheduled Indian Bank (excluding co-operative bank) located in Kochi acceptable to KMRL. The Performance Guarantee shall remain valid for the duration of liability as described in Special Conditions of Contract.

KMRL reserves the right to forfeit the performance guarantee amount, in the event of termination of the Services in accordance with below Clause 17 (ii) or (iii).

In the event of any nonperformance on the part of RAMS Consultancy coming to the notice of KMRL within the period of the Contract Period as described in Clause 12 herein and in the eventuality of the RAMS Consultancy failing to rectify the same, KMRL will forfeit the amount of the Performance Guarantee.

4. Change in Constitution

RAMS Consultancy shall promptly notify KMRL of any changes in the constitution of its consultancy. KMRL reserves the right to terminate the Agreement upon death, retirement, insanity or insolvency of any person being the proprietor/partner in the RAMS Consultancy, or on the addition or introduction of a new partner managing the Project for the RAMS Consultancy without the previous approval in writing of KMRL. But in absence of and until its termination by KMRL as aforesaid, this Agreement shall be in full force and effect, notwithstanding any changes in the constitution of the firm death, retirement, insanity or insolvency of any of its proprietors/partners or addition or introduction of any new partners. In case of death or retirement, the surviving or remaining partners of the firm shall be jointly and severally liable for the due and satisfactory performance of all terms and conditions of the Agreement, and likewise on the addition of a new partner, the latter will also become jointly and severally liable. The clause shall not apply in case of the companies incorporated with limited liability.

5. Information

KMRL shall within a reasonable time give to RAMS Consultancy, free of cost, all information which he is able to obtain and which may pertain to the Services.

6. Decisions

On all matters referred to it in writing by RAMS Consultancy, KMRL shall give a decision in writing within 28 days.

7. Assistance

KMRL shall assist RAMS Consultancy in:

- (i) Providing unobstructed access wherever it is required for providing the Services as per the Scope of Work.
- (ii) Providing access to other organisations/Institutions for collection of information if so required under the scope of the work.

8. Mobilisation of Personnel

The qualifications and experience of the personnel who are sent by RAMS Consultancy to work on the project shall be acceptable to KMRL. The Consultant hereby agrees to engage the Key personnel and sub-Consultants listed by title as well as by Name in the Appendix I: Form 7 in order to fulfil the contractual obligations under the Contract.

9. Representatives

For the administration of the Agreement the RAMS Consultancy shall designate the official or individual to be his representative and who shall be responsible to the Engineer/Employer for various deliverables as per the Scope of services.

10. Changes in Personnel

- (a) Except as the Employer may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultants, it becomes

necessary to replace any of the Personnel, the Tenderer/Bidder shall forthwith provide as a replacement a person of equivalent or better qualifications with the approval of KMRL

- (b) If the Employer (i) finds that any of the Personnel has committed serious misconduct or has been charged with having committed a criminal action, or (ii) has reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Tenderer/Bidder shall, at the Employer's written request specifying the grounds therefore, forthwith, provide as a replacement a person with qualifications and experience acceptable to the Employer.
- (c) For any of the Personnel provided as a replacement under Clauses (a) and (b) above the RAMS shall bear all additional travel and other costs arising out of or incidental to any removal and/or replacement.

11. Liability of Consultancy to KMRL

Tenderer/Bidder shall be liable to pay compensation to KMRL arising out of or in connection with the Agreement if a breach of Contract is established against him. Such compensation shall be limited to the Contract price.

Tenderer/Bidder shall be responsible for complying with all the regulatory requirements pertaining to the contract under the RBI Regulations to the extent applicable.

12. Duration of Liability

Tenderer/Bidder shall not be considered liable for any loss or damage resulting from any occurrence unless a claim is formally made on him before the expiry of the relevant period stated in Special Conditions of Contract, or such earlier date as may be prescribed by law.

13. Agreement Effective Date

This Contract shall come into force and effect on the date of issue of Letter of Acceptance (LOA) by the Employer. The LOA shall continue to remain an active agreement between Employer and the Consultancy till formal Contract Agreement has been signed.

14. Commencement and Completion

The Services shall be commenced and completed at the times or within the periods stated in Special Conditions of Contract subject to extensions in accordance with the Agreement.

15. Modifications

The Contract can be modified in writing on application by either party only by written agreement of Consultancy and KMRL.

16. Exceptional Circumstances

16.1. Force Majeure

If, at any time during the currency of the Contract, the performance in whole or in part by either party of any obligation under this Contract shall be prevented or delayed by reasons of any war, hostilities, invasion, acts of public or foreign enemies, rebellion, revolution, insurrection, civil commotion, sabotage, large scale arson, floods, earthquake, large scale epidemics, nuclear

accidents, any other catastrophic unforeseeable circumstances, quarantine restrictions, any statutory rules, regulations, proclamation, orders for requisitions issued by a Government department or competent authority or acts of God (hereinafter referred to as "event") or any other cause whether of similar or dissimilar nature beyond the reasonable control of the party affected then, provided notice of the happening of such an event as given by either party to the other within 21 days of the occurrence thereof:-

- (a) Neither party shall, by reason of such event, be entitled to terminate the Contract or have claim for damages against the other in respect of such non-performance or delay in performance.
 - (b) The obligation under the Contract shall be resumed as soon as practicable after the event has come to an end or ceased to exist.
 - (c) If the performance in whole or part of any obligation under the Contract is prevented or delayed by reason of the event beyond a period mutually agreed to if any, or 90 days, whichever is more, either party may at its option terminate the Contract.
 - (d) In case of doubt or dispute, whether a particular occurrence should be considered an "event" as defined under this clause, the decision of the Engineer shall be final and binding.
 - (e) If the Contract is terminated under this Clause, the Consultancy shall be paid fully for the work done under the Contract up to date of termination of contract.
 - (f) If neither party issues notice regarding the event within 21 days of its occurrence, the said event shall be deemed not to have occurred and the Contract will continue to have effect as such.
- 16.2. If circumstances arise for which the Tenderer/Bidder is not responsible and which make it impossible for him to perform in whole or in part the Services in accordance with the Contract including force majeure, he shall promptly notify to KMRL. In these circumstances, including force majeure, if certain Services have to be suspended, the time for their completion shall be extended until circumstances no longer exist plus a reasonable period not exceeding 7 days for resumption of them.

17. Abandonment, Suspension or Termination by Notice by KMRL

- (i) KMRL may suspend all or part of the Services or terminate the Agreement by notice of at least 30 days to Tenderer/Bidder who shall immediately make arrangements to stop the Services and minimise the expenditure.
- (ii) If KMRL considers that Tenderer/Bidder is not discharging its obligations, KMRL can inform the Consultancy by written notice, stating grounds thereof. If a satisfactory reply is not received within 7 days of receipt of the notice by Tenderer/Bidder KMRL can by further notice terminate the Agreement provided that such further notice is given within 30 days of the KMRL's former notice.
- (iii) If Tenderer/Bidder is adjudged a bankrupt, or if he makes a general assignment for the benefit of his creditors, or if a receiver is appointed on account of his insolvency, or persistently disregards laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, or otherwise is guilty of a breach of the Agreement, then KMRL may terminate the Services of the Tenderer/Bidder as per the procedure given in the Contract Document.

KMRL may complete the Project by whatever method may be deemed expedient and the Tenderer/Bidder shall not be entitled to receive any additional payment. Also Clause 11 of GCC shall be applied in cases of (ii) and (iii) above.

18. Rights and Liabilities of the Parties

Termination of the Agreement shall not prejudice or affect the accrued rights or claims and liabilities of either party.

This agreement does not purport to create employer- employee relationship of any nature whatsoever between the employer and the tenderer/bidder.

All compliances related to labour matters shall be the responsibility of the tenderer/bidder and a quarterly compliance report regarding the same shall be submitted to the Legal Officer, KMRL.

19. Payment to the Consultancy

KMRL shall pay the Lump Sum Price inclusive of all taxes, duties, cess etc. (which shall cover the sum total of all costs incurred by the Tenderer/Bidder as set out in Special Conditions of Contract Clause 5) to the Tenderer/Bidder towards the performance of services as described in Appendix B of Annexure 1(Schedule of Payments and milestone).

20. Time for Payment

The Consultancy shall, within 21 days of receiving a statement and supporting documents, deliver to the Employer, Payment Certificate showing the amount which the Consultancy considers to be due. The payment of the certified amount shall be made by the Employer within 28 days.

21. Currency of Payment

All payments shall be made in Indian Rupees (INR).

22. Disputed Invoices

If any item or part of an item in an invoice submitted by the Tenderer/Bidder is contested by KMRL then KMRL shall give prompt notice with reasons and shall not delay payment on the balance of the invoice.

23. Languages and Law

This Contract shall be executed in the English language, which shall be binding and controlling language for all matters relating to the meaning or interpretation of this contract.

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law in India. The Consultancys shall perform the Services in accordance with the Applicable Law and shall take all practicable steps to ensure that any Personnel of the Tenderer/Bidder comply with the Applicable Law.

24. Copyright

The copyright of all documents and drawings prepared by the Tenderer/Bidder in performance of the Services under the Agreement shall be vested in KMRL provided that the Tenderer/Bidder may retain copies of the documentation prepared by them and may use and adapt the contents of such documentation for his own use.

25. Confidentiality

The Tenderer/Bidder shall during the tenure of the contract and at any time thereafter maintain strict confidence for all information relating to the work and shall not, unless so authorized in writing by the KMRL, divulge or grant access to any information about the work or its results and shall prevent anyone becoming acquainted with either through managers or its personnel. The Tenderer/Bidder shall not, either during the term or after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the Services, this Contract or the Employer's business or operations without the prior written consent of the Employer. The Tenderer/Bidder shall also return all reports, notes and technical data relating to the operational matters to the KMRL.

The Tenderer/Bidder shall keep secret and confidential and shall not disclose to any third party not use any unauthorized manner any confidential information regarding the present processing technology and the business affairs of the KMRL which the Tenderer/Bidder may have acquired through the negotiations, discussions, examination of drawings, designs, process layout, use of infrastructures, etc., leading to the conclusions of this Contract. The parties further agree not use such information for any purpose whatsoever except in the manner expressly provided for in this Contract. The obligations hereunder shall survive any termination or cancellation of this Contract.

The documents, all original field records, reports, spread sheets or other materials developed by the Tenderer/Bidder under this Contract shall be delivered to KMRL and shall become the property of KMRL, to be used by KMRL in any manner required for the implementation of the project.

However, Tenderer/Bidder may retain and use copies of the Documents for the limited purposes for its reference and record in connection with the Project, and for statutory and regulatory requirements to which Tenderer/Bidder is subject, but Tenderer/Bidder shall not divulge the information collected, or conclusions drawn or recommendations made by it during the performance of the "Services" to any third party unless, and only to the extent, expressly authorised in writing by KMRL to do so, for a period of 5 years from the completion of the contractual obligations.

26. Patents

The Tenderer/Bidder shall at all times indemnify KMRL against all claims which may be made in respect of the items for infringement of any right protected by patent, registration of design or trade mark.

27. Conflict of Interest

The remuneration of the Tenderer/Bidder shall constitute the Tenderer/Bidder's sole remuneration in connection with this Contract or the Services and, the Tenderer/Bidders shall not accept for their own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations hereunder, and the Tenderer/Bidder shall use their best efforts to ensure that any Personnel either of them, similarly shall not receive any such additional remuneration.

Neither the Tenderer/Bidder nor the Personnel of either of them shall engage, either directly or indirectly, in any of the following activities:

- (a) During the term of this Contract, any business or professional activities in India which would conflict with the activities assigned to them under this Contract.

The Tenderer/Bidder shall not be one of the following:

- (i) A firm which has been engaged by the DMRC or by Contractors to provide consulting services for the preparation related to procurement for or implementation of this Project.
- (ii) Any association / affiliation (inclusive of parent firms) of a firm or an organisation mentioned in Para (i) above.
- (iii) A Tenderer/Bidder who lends, or temporarily seconds its personnel to firms or organisations which were engaged in consulting services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity on the same project.

28. Notices

Notices under the Agreement shall be in writing and will take effect from receipt at the address stated in SCC clause 5 of Contract Agreement. Delivery can be by hand or facsimile message against a written confirmation of receipt or by registered letter or by e-mail subsequently confirmed by letter.

29. Publication

Unless otherwise specified in Condition of Contract, Tenderer/Bidder, either alone or jointly with others, can publish material relating to the Services. Publication shall be subject to prior approval by KMRL, if it is within two years of completion or termination of the Services.

30. Claims for Loss or Damage

Subject to Clause 11, any claim for loss or damage arising out of breach or termination of the Agreement shall be agreed between KMRL and the Tenderer/Bidder, failing which the same shall be referred to arbitration in accordance with Clause 34.

31. Taxes and Duties

The RAMS Consultant shall pay such taxes, duties, fees and other impositions as may be levied under the Applicable Laws.

32. Conciliation and Arbitration

Any dispute or claim arising out of or relating to this Agreement or the breach, termination or the invalidity thereof, shall firstly be attempted to be settled by conciliation.

All disputes relating to this Contract on any issue whether arising during the progress of the Services or after the completion or abandonment thereof or any matter directly or indirectly connected with this Agreement shall in the first place be referred to a mutually agreed sole conciliator to be

appointed by KMRL. The conciliator shall make the settlement agreement after the parties reach agreement and shall give an authenticated copy thereof to each of the parties. The settlement agreement shall be final and binding on the parties. The settlement agreement shall have the same status and effect of an arbitral award. The views expressed, or the suggestions made or the admissions made by either party in the course of conciliation proceedings shall not be introduced as evidence in any arbitration proceedings. Any dispute that cannot be settled through the Conciliation procedure shall be referred to Arbitration in accordance with the Rules stipulated in Tender document in force on the effective date of the Agreement. No dispute or difference shall be referred to Arbitration after expiry of 60 days from the date of decision by the Engineer/Conciliator.

33. Settlement of Disputes

If the parties cannot resolve any such dispute, then dispute shall be referred to arbitration. If any dispute or difference of any kind whatsoever, concerning suitability or otherwise of the personnel employed by the Tenderer/Bidder, defective work, etc. compliance with the procedure of the Employer in respect of which the Employer's decision shall be final and binding on Tenderer/Bidder, such disputes shall not be arbitrate.

1. If any dispute or difference arises other than specified above, in connection with or arising out of the Contract Agreement or its construction or the carrying out of the services (whether during the progress or after their completion and whether before or after the determination, abandonment, breach of the Contract Agreement), it shall be referred to Arbitration as per the provisions of the Arbitration and Conciliation Act, 1996 & amendments if any.
2. Disputes to be arbitrated upon shall be referred to a Sole Arbitrator where the individual claim does not exceed Rupees fifteen lakhs or the total value of the claims does not exceed Rupees Fifty lakhs. The Managing Director from the panel of the Engineers/Professionals shall appoint the sole Arbitrator. The panel will be of three Engineers/Professionals, out of which contractor will choose one.
3. Beyond the limits stipulated in (2) above, there shall be three Arbitrators. For this purpose, Managing Director will make out a panel of Engineers with the requisite qualifications and professional experience relevant to the field in which the Contract/Services relates. This panel will be from serving or retired Engineers of the Government Department of Public Sector Undertaking residing in India only. In case three Arbitrators to be appointed, the Employer will make out a panel of five. The Tenderer/Bidder and Employer will choose one Arbitrator each from the above and the two so chosen will choose the third Arbitrator from the above panel only who will act as the "presiding Arbitrator" of the arbitration panel. If in a dispute, the two chosen Arbitrators fail to appoint third Arbitrator — presiding Arbitrator (Arbitration Panel's case) within 30 (Thirty) days after these have been appointed, the Employer may apply to the 'Indian Council of Arbitration, New Delhi', to nominate the third Arbitrator from the same panel of Arbitrators given by the Employer for the matter in dispute.
4. Neither party shall be limited in the in the proceedings before such Arbitrator(s) to the evidence or arguments put before the Engineer for the purpose of obtaining his decision. No decision given by the Engineer in accordance with the foregoing provisions shall disqualify him from being called as a witness and giving evidence before the Arbitrators on any matter, whatsoever, relevant to dispute or difference referred to Arbitrators.
5. If any reason an Arbitrator is unable to perform his function, a substitute shall be appointed in the same manner as the original Arbitrator.

6. While invoking Arbitration, the contractor shall give a list of disputes with amounts in respect of each dispute along with the notice of appointment of Arbitrator. If the Tenderer/Bidder does not make demand for appointment of Arbitrator in respect of any claims in writing as aforesaid, before certification of final stage of payment by the Employer, the claim of Tenderer/Bidder shall be deemed to have been waived and absolutely barred and the Employer shall be discharged and absolved of all liabilities under the contract.
7. English language shall be the official language for all purpose.
8. Where the arbitral award is for payment of money, no interest shall become payable on the whole or any part of the money for any period till the date on which the award is made.
9. The reference to the arbitration shall proceed notwithstanding that works/services shall not then be or alleged to complete, provided always that the obligations of the Employer, the Engineer and the Tenderer/Bidder shall not be altered by the reasons of Arbitration being conducted during the progress of work1services. Neither party shall be entitled to suspend the work/services to which the dispute relates on reason of Arbitration nor shall payments to the Tenderer/Bidder continue to be made in terms of the Contract.
10. The venue of Arbitration proceedings shall be in Kochi,Kerala, India. The fees of the Arbitrators shall be borne by the each party equally.
11. In case of any dispute or difference referred to above, the Tenderer/Bidder shall not stop the work but shall proceed with the work with due diligence and until the receipt of the award in the dispute, decision of the Employer on all such matters shall be binding on the Tenderer/Bidder.
12. The Arbitrator (s) shall always give item-wise and reasoned awards irrespective of the value of claim(s) in the dispute in all cases.
13. The cost inter alia includes the fees of the Arbitrator (s) as per the rate fixed by the Kochi Metro Rail Limited from time to time.
14. In arbitral proceedings with more than one arbitrator, any decision of the arbitral tribunal shall be made by a majority of all its members.

34. Clarification

- (i) If the work to be done is not sufficiently detailed or explained in the contract document, the contractor shall apply to the Employer in writing for further written clarification and shall conform to the clarification provided. The Tenderer/Bidder shall promptly notify the Employer of all errors, omissions, inconsistencies, or other defects (including inaccuracies and inconsistencies) which it discovers in the Contract Documents, and shall obtain from Employer specific instructions in writing regarding any such error, omission, or defect before proceeding with the services affected thereby.
- (ii) The Tenderer/Bidder is fully responsible for all the designs of the work. The Tenderer/Bidder is responsible for correcting any errors, omissions and defects in such design through the design and/or construction process, and shall not be entitled to an increase in the Lump Sum Fixed price or extension of the contract time in connection with such correction.

35. Relations between the Parties

Nothing contained herein shall be construed as establishing a relation of master and servant or of agent and principal as between the Employer and the Tenderer/Bidder. The Tenderer/Bidder, subject to this contract, has complete charge of Personnel performing the Services and shall be fully responsible for the services performed by them or on their behalf hereunder.

36. Amendment to Agreement

Modification of the terms and conditions of this Contract, including any modification of the scope of the Services, may only be made by written agreement between the Parties.

37. Standard of Performance

The Tenderer/Bidder shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe and effective equipment, machinery, materials and methods. The Tenderer/Bidder shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Employer, and shall at all times support and safeguard the Employer's legitimate interest in any dealings with sub-Consultancys.

38. Indemnifications

The Tenderer/Bidder shall indemnify, protect and defend at the Tenderer/Bidder's own expense, the Employer and employees from and against any and all actions, claims, losses or damages arising out of any violation by the Consultancy or in the course of the services of any legal provisions, or any rights or third parties, in respect of literary property rights, copyrights, or patents, Tenderer/Bidder' actions requiring Employer's prior Approval. The Tenderer/Bidder shall obtain the Employer's prior approval in writing before taking any of the following actions:

- (a) Appointing such members of the Personnel which are not listed in proposed key personnel.
- (b) Documents Prepared by the Tenderer/Bidder to be the Property of Employer All plans, drawings, specifications, designs, reports correspondence and other documents prepared by the Tenderer/Bidder in performing the Services shall become and remain the property of the Employer, and the Tenderer/Bidder shall, not later than 30 days upon termination or expiration of this Contract, deliver all such documents to the Employer, together with a detailed inventory thereof. The Tenderer/Bidder shall not use these documents for purposes unrelated to this Contract without the prior written approval of the Employer.

Special Conditions of Contract

Special Conditions of Contract (SCC) Clause No.	Ref to GCC clause no.	Special Condition of Contract
1	1 (xv)	The Project is Kochi Metro Rail Project.
2	3.2	The Performance Guarantee shall be 10% of the Contract Price. Performance Guarantee shall be released within 90 days after the expiry of Defect Liability Period for whole of the work. Performance guarantee will be submitted before Sign of Contract Agreement i.e. within 28 days after issue of LOA.
3	12	Duration of Liability shall be from date of LoA to 2.5 years after ROD of the last 22 stations of Aluva to Petta Corridor.
4	14	<p>The date of commencement shall be the date of Letter of Acceptance. Completion of the all deliverable period shall be in accordance with the work schedule submitted by the all Contractors and subsequently approved by KMRL. A schedule of key dates (Annexure III to ITT) is attached for reference.</p> <p>Completion of the activities of the RAMS Consultancy for each section during the Project Construction Phase shall be regarded to be the date detailed in this contracts scope of work.</p>
5	19	<p>The Lump Sum Price shall cover the sum total of all costs incurred by the RAMS Consultancy for performing the Services. This shall not only include salaries, overheads and non-salary expenses; an allowance for contingencies, fees and profits; but all other costs and expenses, taxes, duties and other imposition under the Applicable Laws, incurred in carrying out the services. This Lump Sum Price shall include all costs of sub-Consultants, sub-contractors, and any other professional fees or services incurred by the Consultancy.</p> <p>The Lump Sum Price shall also include all costs, travel & hotel charges, expenses and allowances paid to or on behalf of expatriate staff working in their own country or in India.</p>
6	28	<p>Notices shall be delivered to: The General Manager (S&T) Kochi Metro Rail Limited 8th Floor, Revenue Tower, Park Avenue, Kochi – 682011, Kerala, India</p>
7	33	<p>The complete clause shall be replaced by: Arbitration</p> <p>If the efforts to resolve all or any of the disputes through conciliation fails, then such disputes or differences, whatsoever arising between the parties, arising out of touching or relating to construction/ manufacture, measuring operation or effect of the</p>

Special Conditions of Contract (SCC) Clause No.	Ref to GCC clause no.	Special Condition of Contract
		<p>Contract or the breach thereof shall be referred to Arbitration in accordance with the following provisions:</p> <p>a) The Arbitration Board will consist of three Arbitrators. The Contractor and the Employer shall appoint their own Arbitrator and the two appointed Arbitrators shall appoint the third Arbitrator in accordance with the Section 11 of "Arbitration and Conciliation Act, 1996", of India. All Arbitrators shall be Indian nationals, ordinary residing in India with technical competence and experience. The Arbitrator(s) shall be appointed within a period of 30 days from the date of receipt of written notice/ demand of appointment of Arbitrator from either party. Neither party shall be limited in the proceedings before such arbitrator(s) to the evidence or arguments put before the Engineer for the purpose of obtaining his decision. No decision given by the Engineer in accordance with the foregoing provisions shall disqualify him from being called as a witness and giving evidence before the arbitrator(s) on any matter, whatsoever, relevant to dispute or difference referred to arbitrator(s). The arbitration proceedings shall be held in Kochi only. The language of proceedings that of documents and communication shall be English.</p> <p>b) The award of majority of three arbitrators shall binding on all parties.</p> <p>c) 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.</p> <p>The cost of arbitration, excluding fees and expenses of the third arbitrator shall be borne by both the parties. The fees and expenses of the third arbitrator shall be shared equally by between the Employer and the Contractor.</p>
8	(New clause)	<p>1 Delays</p> <p>1.1 Time is the essence of the Contract. It shall be the responsibility of the Consultant to strictly adhere to the time for performance of various services indicated in the Contract.</p> <p>1.1 Liquidated damages shall be imposed as described in Appendix 1: Form 2.</p>
9	New Clause	<p>Insurance:</p> <p>The Consultancy shall effect and maintain professional indemnity insurance for the amount in Indian Rupees not less than the contract</p>

Special Conditions of Contract (SCC) Clause No.	Ref to GCC clause no.	Special Condition of Contract
		<p>value in respect of RAMS assessment work to be carried out by Consultancy. The insurance which shall insure the contractor's liability by the reason of professional negligence and errors in RAMS audit and assessment work. The validity period of insurance shall be from date of commencement of works until five years after date of submission of Combined RAMS Assessment Report for Phase II as appendix B to Annexure 1 of ITT.</p> <p>Where the Contractor maintains a corporate Professional Indemnity Insurance on an annual basis this requirement may be waived. The Contractor will be required to submit evidence to KMRL on an annual basis that this insurance is being maintained.</p>
10	New Clause	<p>Jurisdiction of Court</p> <p>Jurisdiction of Court in case of dispute or differences arising on account of this Tender: Any suit or application shall be filed in a competent court at Kochi, Kerala, only and no other court or any other district of the country shall have any jurisdiction in the matter</p>