

BEML LIMITED

(A Govt. of India Mini Ratna Company under Ministry of Defence)
BANGALORE COMPLEX, POST BOX: 7501, NEW THIPPASANDRA POST,
BANGALORE-560075

NOTICE INVITING TENDER

BID INVITATION NO: 6300039536

Dt:21.05.2025

Subject: Design, Development, Testing, Manufacture & Supply of Floor Covering required for 210 cars of Chennai Metro Rail Project-Phase II (ARE02A).

Quotation/offer are invited from Original Equipment Manufacturer (OEM) or authorized representatives of OEMs of **Floor Covering** for Metro Rolling stock having experience in Design, Development, Testing, Manufacture & Supply of Floor Covering in accordance with the enclosed terms and conditions within the tender closing date.

Quotations should be submitted online (E-mode) in BEML SRM Portal in Two-Bid system as below:

- 1) Technical Bid**
- 2) Commercial Bid**

Note: Commercial bids of only technically acceptable firms will be opened and considered for further evaluation by BEML.

Please note that bidder should be having a **valid Class-III Digital Signature Certificate** issued by authorized Certifying Authority to submit bid in our SRM e-Procurement system. Interested bidders can contact BEML through e-mail: admin.srm@beml.co.in to obtain the username & password for submitting the quotations In case of any queries, you may contact BEML SRM Team on phone no. **080-22963269**

Note: - The tender consists of 49 Nos. of pages including this page.

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3. General Instructions to Bidders:

1. The Bidders are advised to carefully go through, read and understand this tender document completely including terms and conditions, Annexures and Appendices etc. before submitting bids
 - i. This NIT is not transferable under any circumstances.
 - ii. All entries in the bids, formats which would be part of bids shall be in English either typed or written legibly. Erasing, over-writings and use of correction fluids are not permitted. All cancellations and insertions should be duly signed / attested by bidder concerned.
 - iii. All the corresponding documents shall be attached along with the quotation/offer
 - iv. The bidder shall **sign each and every page of tender document** before submitting the tender. No corrections/revisions will be entertained after opening the bids.
 - v. Late and/or incomplete tender shall not be considered.
 - vi. Canvassing in any manner including unsolicited letters and request for post tender corrections shall render offers of such parties liable for rejection.
 - vii. Bidder shall ensure that all the information & documents submitted by them are true & correct.
 - viii. In case, it comes to the knowledge of BEML that the bidder has submitted false information before awarding of contract then the offer would be rejected.
 - ix. In the event, it comes to the knowledge of BEML that the successful bidder has submitted false information, subsequent to the award of contract, the contract shall be cancelled/short closed by the company and shall invoke Risk purchase clause with liabilities on such bidder for the entire contract quantity. The PBG shall also be encashed as a result of consequence of breach of contract at the discretion of BEML.
2. Abbreviations used in this NIT

GeM-Government E Market Place	BEML -BEML Limited
NIT- Notice Inviting Tender	CMRL -Chennai Metro Rail Limited
TS-Train set	ERTS – RS – System Requirements
PTS- Procurement Technical Specification	DLP -Defect Liability Period
PO-Purchase order	DNP – Defect Notification Period
GTC- General Terms and Conditions	PBG – Performance Bank Guarantee
CMC – Comprehensive Maintenance Contract	SRM- Supplier Relationship Management

3. In case any person/persons, Company, firm, Associations having any litigation, arbitration cases between themselves and BEML Ltd, pending before any court of law/ Arbitrator shall not be eligible to participate in this tender.
4. Non-compliance with any of the tender conditions, incomplete offers, conditional and ambiguous offers are not acceptable and liable for rejection.
5. The bidder shall fill in all the required particulars in the blank space provided for the purpose in the tender document.

6. All the documents shall be uploaded in BEML SRM Portal.
7. Fax/email quotations are not acceptable.
8. BEML reserves the right to accept or reject all tenders or any tender in part or full without assigning any reasons thereto, which is final & binding on the Bidder

4. DETAILS OF THE TENDER

This "Notice Inviting Tender" hereinafter referred to as the 'NIT' is designated as the tender for **Design, Development, Testing, Manufacture & Supply of Floor Covering required for 210 cars of Chennai Metro Rail Project-Phase II (ARE02A).**

1) The tender consists of two parts as indicated below:

Sl. No.	Nature of Bid	Mode of Submission	Details
1	Technical Bid	BEML SRM Portal	Technical Bid (Without Price Details) shall be uploaded and submitted in the BEML SRM Portal, wherein only technical Bid /technical information in BEML SRM Portal shall be uploaded
2	Commercial Bid	BEML SRM Portal	Price details to be duly filled in specified field on BEML SRM Portal. Evaluation is based on the total bid value of all the items & services.

2) Details of Items & Services:

1. Equipment with DNP/DLP

Table-1.1 Equipment Quantity:

Sl No	Part No	Description	UoM	Qty/ T.Set	Qty for 210 Cars (70 T.Sets)	Qty Fire Test	Total Qty
1	R307495031	Floor Covering - Middle confirming to PTS Doc. No. GR/TD/7071 latest revision. Length = 22000 mm Width = 1200 mm Thickness = 3 mm Colour as specified in the PTS GR/TD/7071.	NO	3	210	1	211
2	R307495032	Floor Covering - Side confirming to PTS Doc. No. GR/TD/7071 latest revision. Length = 22000 mm Width = 800 mm Thickness = 3 mm Colour as specified in the PTS GR/TD/7071.	NO	6	420	2	422
3	52416140	Wheelchair Logo confirming to drawing number 50716140 and PTS Doc. No. GR/TD/7071 latest revision.	NO	2	140	0	140
4	R607926003	Joint Sealer confirming to PTS Doc. No. GR/TD/7071 latest revision and colour matching to the Floor Covering. Cartridge = 290 to 300 ml.	NO	9	630	3	633

Spares and consumables including Service for Defect Notification period (DNP)/ Defect Liability Period (DLP) as per ERTS requirements. Detailed BOM for DNP/DLP Spares and Consumables for warranty period to be provided by the bidder.

Table-1.2: Non-Recurring Cost (NRC)

Sl No	Description	UoM	Qty/ Project
1	Design and Submission of design Documents for Floor covering items	AU	1

Table-1.3 FAI Reports and Type Test & Report

Sl No	Description	UoM	Qty/ Project
1	FAI Reports and Type Test & Report for Floor covering items	AU	1

Required Delivery Schedule: For Floor Covering

Sl No	Part No / Description	Total Qty (Trainsets)	Schedule	No of Train Sets (3 Cars/TS)
1	Equipment with DNP/DLP	70 TS (210 cars)	Mar'26	1
			Jun'26	3
			Aug'26	3
			Jan'27	4
			Feb'27	4
			Mar'27	3
			April'27	3
			May'27	4
			June'27	3
			July'27	4
			Aug'27	3
			Sep'27	3
			Oct'27	3
			Nov'27	3
			Dec'27	3
			Jan'28	4
			Feb'28	4
			March'28	3
			April'28	4
			May'28	4
			June'28	4
3	Non-Recurring activities- Design and Submission of Design Documents	PDR: Jul-25 PFDR: Mar-26 FDR: Jun-26		
4	FAI Reports and Type Test & Report	Mar.26		

Note: a) Delivery schedule proposed above is tentative. However, it can be mutually discussed and agreed in line with key dates of CMRL contract. b) 1 Trainset comprises of 2 DM car and 1 T car

5. SUBMISSIONS OF TECHNICAL BID

Technical Bid submission Conditions	<p><u>TECHNICAL BID (Without Price Details)</u> shall be uploaded and submitted in the BEML SRM Portal, wherein only technical Bid /technical information in BEML SRM Portal shall be uploaded as indicated below:</p> <ol style="list-style-type: none"> a. Bidders should upload duly filled, signed & stamped Integrity Pact with two witnesses [Appendix – A]. b. Clause by Clause compliance for the BEML Procurement Technical Specification (PTS): Doc no: PTS Doc No GR/TD/7071 latest revision. [Appendix – B]. Bidders to refer “PTS” (Annexure-I) enclosed along with this tender document. Bidders should upload the following documents duly filled, signature & stamped under technical bid. Formats as per PTS also to be submitted. c. Bidder to upload enclosures related to technical & other information deemed appropriate in respect of this tender on the letter head of the company, if any. Photographs / Drawings if any, may be uploaded. d. Bidders to refer “GENERAL TERMS AND CONDITIONS (GTC)” (Annexure-II) enclosed in this tender document and upload clause by clause compliance of GTC duly filled, signature & stamped along with the supporting documents as specified therein. [Appendix – C] e. Bidders to commit that they will support BEML for requirement of any additional equipment, spares, service required at the later stage ie after 1st year of taking over and up to completion of CMC period. (Appendix- D) f. Bidders to upload duly filled, signature & stamped confidentiality agreement in plain paper [Appendix – E] g. Bidders to upload duly filled, signature & stamped Compliance to Land border sharing Clause – [Appendix – F] h. Bidders to upload duly filled, signature & stamped Compliance to purchase preference under public procurement policy – [Appendix – G] i. Bidders to upload duly filled, signature & stamped Compliance to Contact Details of Supplier/ Bidder – [Appendix – H] j. Bidders to upload duly filled, signature & stamped Compliance to Delivery Schedule – [Appendix – I] <p>BEML at its sole discretion reserves the right to seek the Soft/ Hard copies of the documents which are already been uploaded in SRM through Courier / post pertaining to technical bid of this tender enquiry at a later date, if required.</p> <p>In such cases, only the documents uploaded in SRM Portal in original has to be couriered at the request of BEML. Any irrelevant documents furnished through courier will not be considered.</p> <p>NOTE: Please note Commercial Bid /Price details should not be indicated in TECHNICAL BID, else bid will not be considered for further evaluation.</p>
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6. SUBMISSIONS OF COMMERCIAL BID

The price bid to be submitted through BEML SRM Portal. The following details are to be entered in the BEML SRM Portal.

Table-1. Equipment with DNP/DLP						
Sl. No	BEML Part no	Description	UoM	Total Quantity for 210 Cars (70 T. Sets)	Unit Rate in INR	Total Quantity for 210 Cars (70 T. Sets)
1	R307495031	Floor Covering - Middle confirming to PTS Doc. No. GR/TD/7071 latest revision. Length = 22000 mm Width = 1200 mm Thickness = 3 mm Colour as specified in the PTS GR/TD/7071.	NO	211	Price to be uploaded in commercial bid only	Price to be uploaded in commercial bid only
2	R307495032	Floor Covering - Side confirming to PTS Doc. No. GR/TD/7071 latest revision. Length = 22000 mm Width = 800 mm Thickness = 3 mm Colour as specified in the PTS GR/TD/7071.	NO	422	Price to be uploaded in commercial bid only	Price to be uploaded in commercial bid only
3	52416140	Wheelchair Logo confirming to drawing number 50716140 and PTS Doc. No. GR/TD/7071 latest revision.	NO	140	Price to be uploaded in commercial bid only	Price to be uploaded in commercial bid only
4	R607926003	Joint Sealer confirming to PTS Doc. No. GR/TD/7071 latest revision and colour matching to the Floor Covering. Cartridge = 290 to 300 ml.	NO	633	Price to be uploaded in commercial bid only	Price to be uploaded in commercial bid only
5	NRC	Design and Submission of design Documents for Floor Covering items	AU	1	Price to be uploaded in commercial bid only	Price to be uploaded in commercial bid only
6	--	FAI Reports and Type Test & Report for Floor Covering items	AU	1	Price to be uploaded in commercial bid only	Price to be uploaded in commercial bid only
Total						
The prices are firm and fixed. PVC (Price variation clause) is not applicable						

Note:

1. Bidder has to quote for all the items in SRM Portal
2. Commercial evaluation will be arrived based on grand total of all the tendered items (i.e. Equipment with DNP/DLP – Table-1)

3. The commercial bids of the technically acceptable vendors only will be opened for further commercial evaluation.
4. . Acceptable Currencies as per CMRL Contract:
 - a) **INDIAN RUPEE (INR)**
 - b) **EURO (EUR)**
 - c) **JAPANESE YEN (JPY)**
5. For the purpose of arriving the landed cost in INR, the exchange rates for EUR/JPY prevailing as on date of tender opening. (Date of Technical bid opening in case of two bid tender)
6. In case of Foreign bidders, for the purpose of arriving the landed Cost in INR, Freight charges of 4.5% shall be loaded during price evaluation.
7. Reverse auction will be conducted at the sole discretion of BEML among technically qualified Bidders and L1 status will be arrived based on total landed bid value. (i.e. Table-1).

[ANNEXURE – II]

GENERAL TERMS & CONDITIONS (GTC) FOR PROCUREMENT OF MATERIALS:

1. GLOSSARY, DEFINITIONS & INTERPRETATIONS

1.

- a) The Purchaser means “(include company name and address)” (A Government of India Undertaking) incorporated under the Companies Act having its registered office at “BEML Soudha, No 23/1, 4th main, S.R. Nagar, Bengaluru – 560027” and shall be deemed to include its successors and assignee.
- b) Supplier’ means a person having been included in a contract as a Contractor and also means a firm or company with whom the order for supply/execution of work is placed and shall be deemed to include the supplier’s successors, (approved by BEML Ltd.,) representatives, heirs, executors and administrators. The supplier may also be referred to as the supplier, Contractor or vendor.
- c) Parties to the Contract’ shall mean the Supplier and the Purchaser as named in the main body of the Purchase Order.
- d) Tender’ means and includes quotation, invitation to tender and all other documents like drawings, specifications, quality plan, etc that form part of the tender document.
- e) Acceptance of Tender’ Means the letter of memorandum communicating supplier, the acceptance of the Tender and includes advance acceptance of this tender.
- f) Purchase Orders (PO) / Contract’ means and includes the invitation to tender, instruction to Tenderers, acceptance of tender, Letter of intent / letter of award, the general terms and conditions of Purchase Order / contract, special conditions of Purchase Order /contract, particulars, descriptions, specifications, schedule of prices, quantities, quality plan, drawings enclosed and other condition specified in the acceptance of tenders and includes the repeat order which has been accepted or acted upon by / for the supplier for the supply of stores and includes an order for performance of service and includes amendments, if any, that may take place subsequent to the discussions, negotiations, mutual agreement if any.
- g) Stores / Materials / Services’ means the goods or services as described in Procurement Technical Specification (P.T.S.) and in the Purchase Order which the supplier has agreed to supply under the Purchase Order.
- h) Specification means technical specifications of the Equipment / Material as set forth in Procurement technical specification (PTS) / technical drawings, which is part of tender. Employer(CMRL) Requirement Technical specification (ERTS) & Employer (CMRL) General Condition of contract(GCC) and Employer Particular condition of Contract (PCC)
- i) End-Customer / End-user means: Chennai Metro Rail Limited (CMRL).
- j) Words in singular include the plural & vice-versa.

- k) Words imparting the masculine gender shall be taken to include the feminine gender and words imparting persons shall include any firm, company or associations or body of individuals whether incorporated or not.
- l) The heading of these conditions shall not affect the interpretations or construction thereof
of the contract.
- m) C.F.R / F.O.B / F.D.D / DAP. is to be interpreted in accordance with the provisions of INCOTERMS 2020, unless otherwise specified in this Tender Document / Purchase order.

2. SUBMISSION OF THE TENDER:

Tender is in TWO-BID system (Technical & Commercial Bid)

Bids should be submitted online mode only as follows:

a) Submission of Technical bid (without price):

- i. The Bidder should upload all the requisite technical documents along with respective supporting documents and other information deemed appropriate in respect of the Tender.
- ii. **The price details/commercial bid details should not be given in the Technical bid.** If any of the bidder have given any price/commercial details in the Technical bid, their offer is liable for rejection and will not be considered for further evaluation.
- iii. Technical Bid will be opened on date and time of bid opening and the commercial Bids of those bidders whose technical bids are qualified (accepted) only will be opened for commercial evaluation.

b) Submission of Commercial bid:

- i. The Commercial Bids of those bidders whose technical bids are qualified (accepted) only will be opened for commercial evaluation.
- ii. Price details in specified field on BEML SRM Portal to be submitted.
- iii. Bidder to quote for all the items /Services.

c) General:

- i. If dealers are submitting the bids in place of OEM, Dealer should submit Authorization letter from OEM.
- ii. BEML reserves right to reject the tender due to unsatisfactory past performance in the execution of a contract at any of BEML projects / units.
- iii. Bidders participating in the tender should declare in their offer that whether they have been black-listed / kept on hold for a specified period / given Business holiday for a specified period by any Public sector undertaking or Government departments. The reasons for such action with details and the current status of such hold shall be furnished to BEML.

- iv. In case any person/persons, Company, firm, Associations having any litigations, arbitration cases between themselves and BEML Ltd, pending before the Court / Arbitrator or initiated litigations/arbitrations in connection with any contract / tender issued by BEML Ltd and any contractor has defaulted against the BEML's orders, they are not eligible to participate in this tender.
- v. BEML may decide to scrap the tender/refloat the tender without assigning any reasons thereof before LOI/PO is committed. BEML reserves the right to accept, split, divide, negotiate, cancel or reject any tender or reject all tenders at any time prior to the award of the contract without incurring any liability to the affected tenderers or any obligation to inform affected tenderer, the grounds of such action.
- vi. BEML reserves the right to verify, in its sole discretion, any information given by the bidders independently through any third-party agencies. During this process, if it is found that any of the information given by the bidder is false / misleading, offers of such bidders would be out rightly rejected.
- vii. BEML also reserves the right to independently assess the capability and capacity of the bidder for execution of the order/contract. BEML's decision on any matter regarding short listing of bidders shall be final.
- viii. The Tender / Notice Inviting Tender is not an offer or a contract.
- ix. Bidders will not be compensated or reimbursed for the costs incurred in preparing Proposals. Proposals shall become BEML property.
- x. BEML's decision is final for Evaluation of the offers which is also based on Employer's (CMRL) requirement and conditions of contract for ARE02A Project.

3. SUPPLIERS SHARING LAND BORDER WITH INDIA:

Land border sharing Declaration in line with Department of Expenditure's (DOE) Public Procurement Division order vide F. No. 6/18/2019-PPD dated 23.07.2020 & 24.07.2020 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products, shall be applicable for bidders / suppliers sharing land border with India. Bidders to upload signed & sealed compliance as per appendix attached as part of Technical Bid.

4. PREFERENCE TO MAKE IN INDIA:

Purchase Preferences as per MII (Make In India Policy) and MSE Purchase Preference as Per Public Procurement Policy is Applicable in-line with revised public procurement (preference to make in India), order 2017 dated 04th June, 2020 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products, shall be applicable for bidders / suppliers under Purchase preferences. Bidders shall upload necessary supporting documents and to upload signed & sealed as per appendix attached as part of Technical Bid.

5. DELIVERY TERMS:

- a) In case of foreign Supplier: F.O.B (Free on Board) to nearest port basis. The intimation for shipment should be provided 21 days prior to the delivery schedule to our nominated freight forwarder and the consignment to be handed over to our freight forwarder before the cut-off date for sailing.

- b) In case of Domestic Supplier: F.O.R (Free on Road) /F.D.D. (Free Door Delivery),
BEML, Bangalore Complex.

6. PAYMENT:

I. SUPPLIES (Equipment):

a) APPLICABLE TO FOREIGN BIDDERS:

- i. TT payment -100% 60 days from the date of receipt of material at BEML stores subject to inspection clearance.
- ii. All bank charges incurred in India shall be borne by BEML and all bank charges outside India shall be borne by the supplier.

b) APPLICABLE TO DOMESTIC BIDDERS:

Terms of payment are 100% in 60 days from the date of receipt of material at BEML stores subject to inspection clearance & for MSEs in 45 days from the date of receipt of material subject to inspection clearance as per MSME act.

Bidders to indicate the category of their firm under Micro/Small/Medium industries with necessary documentary proof of evidence for purpose of evaluation and our data updation.

II. NON-RECURRING (NRC) AND FAI REPORTS, TYPE TEST REPORTS:

- i. **NRC:** 100% payable on 60th day after completion of NRC activities subject to acceptance by BEML R&D and for MSEs 45 days after completion of NRC activities subject to acceptance by BEML R&D
- ii. **FAI Reports and Type test reports:** 100% payable on 60th day after completion of FAI activities and submission of FAI reports and type test reports subject to acceptance by BEML R&D and for MSEs 45 days after completion of FAI activities and submission of FAI reports and type test reports subject to acceptance by BEML R&D.

Micro and Small enterprises (MSE) registered under UDYAM registration are eligible for the 45 days payment on submission copy of MSE certificate issued by UDYAM.

TDS: TDS (Tax deducted at source) will be applicable for service purchase orders and will be deducted as per law of land. SAC (Service Account code) shall be indicated by the bidder for the services that are proposed be carried out.

For Bidders not agreeing with above terms, their prices will be suitably loaded with applicable cash credit interest while evaluation of bids.

The payment is further subject to the following:

- a) The Invoice shall be compliant with GST laws.
- b) GST liability is to be discharged and ensure filing of outward supply details on GSTN portal within timeline prescribed.
- c) Any debit note/supplementary invoice if any, is to be raised within September month following the respective financial year of filing of annual return by BEML, which ever is earlier.
- d) Any loss of tax credit due to the reason attributable to supplier shall be recovered from supplier along with applicable interest and penalty.
- e) Bidders to indicate the GST and other levies applicable. GST shall be paid only after confirmation of payment of GST by vendors on GST Website.
- f) Relevant TDS / TCS as applicable shall be deducted as per prevailing Income Tax / GST / GOI notifications
- g) The supplier should submit the following documents for each supply:
 - Tax Invoice; GSTR-1 return filed with authorities with the relevant abstract
 - GSTR-3B return or any other form of return prescribed by the authorities.
 - Copy of Challans regarding deposit of GST
 - Certificate of Chartered Accountant

7. PRICE BID VALIDITY:

The Bid should be valid for 180 days from the date of tender opening. BEML's acceptance of the tender at the quoted / negotiated rates will be binding on the tenderer during the tenure of contract.

8. FIRM PRICE FOR SUPPLY, NON-RECURRING SCOPE AND DELIVERABLES:

The prices remain firm for the entire supplies of the purchase order and no escalation shall be entertained under any circumstances. The prices are to be firm & no increase in finalized price will be entertained after awarding contract during the period of Contract for any reasons whatsoever.

9. INSPECTION:

The Supplier guarantees that the delivery is of good quality and free from all defects and in the case of services rendered that they are performed by skilled personnel and that new materials are used.

The Supplier guarantees that the delivery corresponds exactly with the provisions of the agreement, the reasonable expectations of BEML regarding the characteristics, quality and reliability of delivery.

The Supplier guarantees that the delivery is suitable for the purpose for which it is intended by its very nature or which is evident from the specifications listed and from the order.

The Supplier guarantees that the delivery complies with legal requirements applicable in India and other (international) Government regulations, as applicable.

The supplier guarantees that the delivery complies with the customary norms and standards in the relevant branch of trade or industry. The supplier shall be responsible for compliance

with applicable technical, safety, quality, environmental requirements and other regulations in relation to his product, packaging, and raw and ancillary materials.

10. **WARRANTY:**

- a) The supplied goods/stores to the purchaser under the contract shall be of the highest grade, free of all the defects & faults in material and of the best quality, manufacture and workmanship and consistent with the established and generally accepted standards for materials of the type ordered and in full conformity with the contract specification, drawing or sample, if any and shall, if operable, operate properly throughout warranty period.

Any defect/fault & non-conformance to standards & descriptions as aforesaid, found during warranty period shall be rectified /repaired/replaced free of cost & at supplier's risk to the complete satisfaction of BEML / End user, within reasonable time at the ultimate destination.

(A) Warranty for Design, Development, Testing, Manufacture, Supply, NRC and FAI, Types Test reports:

The said goods/stores shall be warrantied /guaranteed for a period of 24 months from the date of taking over of last trainset by CMRL.

b) Defect Liability Period (DLP) / Defect Notification period (DNP):

Defect Liability / Notification period shall start after taking over of first train set by customer and shall end two years after taking over certificate date of 70th train set.

Bidders to refer PTS doc no: GR/TD/7071 Latest revision for detailed scope of DLP/DNP.

If the Works or sections are not available for usage by end user (CMRL) for more than 48 hrs, then a penalty shall be paid by the supplier as applicable in same lines as per CMRL contract where the non-usage is due to vendor supply.

As per CMRL contract, "the cumulative amount shall be deducted by the Employer from the subsequent bills submitted by Contractor.

- Rolling Stock: Rs. 25,000 per day/ train

A penalty of Rs. 2 lakhs for each case shall be levied for the failure or malfunction in the Works or sections during passenger operation which interrupt metro operations in the specific corridor for more than 10 mins"

c) Extension of DLP:

- i. Train/System/Sub-system level extension of DLP will be applicable in the case where reliability targets defined as per ERTS 18.6 are not met.
- ii. In case of any retrofits/modifications done by the suppliers in any specific system/sub-system/function/component/software shall be subjected to 24 months warranty from the date of completion of retrofit/modification in that

train spares. This specific 24-month warranty is irrespective of the train DLP/warranty

- iii. There shall be no delay in start of CMC period of car, However, If the DLP / DNP extension arose on account of non-fulfilment of the Reliability Demonstration targets for subject aggregate for which the tendering is done (Floor Covering) (as defined in ERTS-RS clause 18.6), then payments against Rolling stock CMC shall be reduced by 65% by CMRL on payment to BEML. The same will be reduced in payment to Floor Covering supplier on back-to-back basis

d) Guarantee / Warranty replacement:

Guarantee / Warranty replacement shall be dispatched on “DDP / F.O.R – BEML Stores / designated destination” basis for replaceable items during warranty period.

The provisions of this Warranty shall be without prejudice to and shall not be deemed or construed so as to limit or exclude any rights or remedies which the BEML may have against the supplier, whether in tort or otherwise.

If any defect or damage is one requiring immediate attention from safety / environmental view point / operational viewpoint, then BEML has the authority to proceed with rectification in any manner suitable and deduct such sums from the suppliers Bill or purchase order whichever is active.

11. PERFORMANCE SECURITY / PERFORMANCE BANK GUARANTEE (PBG):

Firm shall submit the following Performance Bank Guarantee:

(A) FOR SUPPLY OF EQUIPMENTS, NON-RECURRING SCOPE, FAI REPORTS & TYPE TEST REPORTS:

- a) Supplier should submit Single Performance Bank Guarantee for amount equivalent to 10% of the Contract value valid till issue of taking over certificate for last trainset by end customer (CMRL). The bank guarantee has to be submitted within 60 days from the date release of Purchase order from BEML but not later than 30 days before commencement of supplies pertaining to first delivery schedule indicated in the purchase order
- b) In case BEML is constrained to extend the Performance Bank Guarantee to its customer (CMRL), due to the failure of aggregates attributable to the supplies made by the supplier or non-fulfilment of NRC activities as applicable, then the costs involved to BEML for such PBG extensions shall be borne by the supplier.
- c) Performance Bank Guarantee shall be returned back only after completion of issue of taking over certificate for last trainset by end customer (CMRL) and if there is no defect / failure / negligence / complaints and /or any claims notified to BEML on part of supplier in fulfilling the supplies and activities

- d) If the minor outstanding works as incorporated in the taking over certificate are not attended by the Supplier within the specified time frame, full amount of Performance Security due to the Supplier shall not be released

General terms of PBG:

- a) In case of foreign bank guarantees, the BGs from foreign banks, authorized /recognized by RBI to issue a Bank Guarantee, in their own letter head will be accepted.

In the case of PBG/s submitted from Indian Bank, the PBG shall be furnished by Scheduled Commercial Banks authorized by RBI to issue a Bank Guarantee.

Format for PBG is attached for reference.

PBG shall be returned back only after completion of necessary Warranty and if there is no defect /failure/negligence/complaints and /or any claims notified to BEML on part of supplier in fulfilling the supplies and activities.

- b) In the absence of performance bank guarantee to be submitted by the supplier as per contract terms, BEML will not open Letter of Credit (LC) in the cases of LC in favor of supplier pertaining to the shipment / stores to be supplied as per first delivery schedule indicated in the purchase order. Any delay in submission of performance bank guarantee by the supplier, the subsequent delay in opening in Letter of Credit by BEML and supplies to be effected by the supplier are to the account of the supplier, which attracts liquidated damage charges as per contract terms.
- c) No claim shall lie against BEML Ltd., in respect of interest on cash deposits or Govt. Securities depreciation thereof.
- d) BEML shall be entitled to and it shall be lawful on its part to encash the Bank Guarantee in whole or in part in the event of any default, failure or neglect on the part of the supplier in the fulfilment or performance in all respect of the Purchase Order.
- e) The Bank Guarantee shall be established through **Structured Financial Messaging System (SFMS)** mode from a Scheduled Commercial Bank authorized by RBI in India as defined by RBI.
- f) A separate copy of the BG has to be sent by the issuing bank to the Purchaser's bank through SFMS. The details of Purchaser's bank are as under:

STATE BANK OF INDIA

Overseas Branch, No.65,

St. Marks Road,

Bangalore – 560001

IFSC Code: SBIN0006861

- g) Following codes are to be used by issuing bank for the purpose of Confirmation and amendment in Bank Guarantees:

Code	Purpose
MT760	Confirmation of Bank Guarantee
MT767	Amendment in Bank Guarantee

- h) Bank Guarantee issued on the SFMS platform with any other code other than mentioned above for the purpose shall not be acceptable to the Purchaser. The Bank Guarantee validity shall be extended as required till the completion of all contractual and warranty obligations in Full.
- i) PBG has to be submitted in electronic form through NeSL platform as required by BEML.

12. RIGHT TO VARY QUANTITIES & QUANTITY OPTION CLAUSE:

- a) BEML reserves the right to increase or decrease the quantity specified in the schedule of requirements without any change in the unit price or other terms and conditions within the agreed delivery schedule
- b) BEML may at its discretion may advice the supplier in writing about the increase of the total quantity up to 10 complete train sets requirement of 3 cars each i.e. 30 cars.
- c) Supplier shall be required to supply increased ordered quantities at the contracted terms & conditions and determined prices (Excluding design cost, Type test cost, FAI test cost) and no additional amount on account of quantity variation or escalation or any other account whatsoever payable to the supplier
- d) In case of increase in quantity beyond the original bid quantity, the delivery schedule for the increased quantities shall be mutually decided at the time of exercise of quantity variation by the Purchaser

13. LIQUIDATED DAMAGES CLAUSE:

The time and the date of delivery of the stores stipulated in the PO shall be deemed to be the essence of the Purchase order and delivery must be completed not later than the dates specified therein. The supplier shall strictly adhere to the delivery schedule indicated in the PO. Any supplies made ahead of this schedule are liable for rejection at the discretion of BEML. Should the supplier fail to deliver the stores or any consignment thereon within the period prescribed for such delivery, BEML shall be entitled:

“To accept the delayed supply and to recover from the supplier Liquidated Damage charges at the rate of 0.1% of total value of the amounts apportioned to the affected delivery schedule for each calendar day of delay for first 28 days and 0.2% of the total value of the amounts apportioned to the affected delivery schedule for each calendar day of delays from 29th day to the maximum of 10% of the affected schedule of the purchase order.”

The penalty / LD will be charged on the value of the affected delivery schedule excluding statutory levies, freight and insurance wherever not included in the price.

14. RISK PURCHASE CLAUSE:

The time and the date of delivery of the stores stipulated in the PO shall be deemed to be the essence of PO and delivery must be completed not later than the date specified therein. Shall the supplier fail to deliver the stores/services or any consignment thereof within the period prescribed for such delivery, BEML shall be entitled at their option either;

- a. To purchase elsewhere, without notice to the supplier on the account and at the risk and cost of the supplier the stores not delivered or other of a similar description

(where stores exactly complying with the description and readily procurable) without cancelling the PO in respect of consignment not due for delivery

or

- b. To cancel the purchase order.

In the event of action being taken under clause (a) or (b) above, the supplier shall be liable for any loss, which BEML may sustain on that account but the supplier shall not be entitled to any gain or purchases made against default. As soon as it is apparent that the scheduled dates cannot be adhered to, an application shall be sent by the supplier to BEML, well before the expiry of the delivery period specified in the purchase order. Without prejudice to the foregoing rights, if such failure to deliver in proper time as aforesaid shall have arisen from any cause which BEML may admit as a reasonable ground for an extension of the time (and their decision shall be final) they may allow such additional time as they may consider justified by circumstances of the case.

Delivery required to be made in lots shall be made in lots only and any extra deliveries involved either on account of repeated rejections or variance in supply of lots shall be liable for service charges of 5% of the purchase order value for each extra delivery.

15. SECRECY AND CONFIDENTIALITY:

- a) All the information, know-how, technical data, specification and drawing models or specimens furnished by BEML for the purpose of or in connection with the manufacture and supply of the stores hereby tendered constitute the property of BEML and the supplier shall keep them in strict confidence and he/ she shall not divulge the same to anyone else except under the authority and for the purpose of BEML. All such documents, data, drawing, models and specimens are the property of BEML and shall be returned when done with or when demanded by BEML.
- b) The supplier shall not supply the material ordered by BEML to anyone else other than BEML and shall not disclose any initiations, development or adaptations thereof to anyone.
- c) BEML shall be entitled to prevent a breach of the above and claim damages in case of breach. In case of non-performance in this PO, BEML will have to take procurement action at your risks and cost apart from levy of liquidated damages.
- d) Confidentiality agreement to be executed as per Appendix E.

16. AUTHORITY OF PERSONS SIGNING DOCUMENT:

A person signing the tender or any other document in respect of the tender shall be deemed to have power to do so on behalf of the Supplier.

17. ACCEPTANCE OF ORDER:

The supplier shall send Order Acceptance within two weeks from the date of LOI/LOA/Purchase Order or such other period as specified / agreed by the Purchaser. Purchaser reserves the right to revoke the order placed if the order confirmation differs

from the original Purchase Order placed and the Purchaser shall only be legally bound after it has agreed explicitly in writing to be in agreement with the deviation. The acceptance of deliveries or supplies by Purchaser as well as payments made in this regard shall not imply acceptance of any deviations. The Purchase Order will be deemed to have been accepted if no communication to the contrary is received within two weeks (or the time limit as specified / agreed by the Purchaser) of receipt of the order.

18. OTHER CONDITIONS:

- a) Refer BEML Purchase Manual (can be accessed in BEML website www.bemlindia.in) for Important terms and conditions of tender and General Terms & conditions applicable to contracts & purchase orders refer General Terms & Conditions
- b) The firm shall take necessary permission for their employees to enter the factory premises and the firm shall arrange ESI & PF coverage to their employees / labourers if any from their end. The firm shall indicate ESI NUMBERS for the labourers hired or employed in advance in order to prepare work permit inside the factory.
- c) BEML will not have any kind of binding towards the compensation on case of injury / death to the firms employees while working in BEML premises or other wises.
- d) BEML will not have any kind of binding on damages or loss to the tools/instruments etc. brought by the firm for commissioning purpose.

19. PRICE, INVOICING AND PAYMENT:

- a) The agreed prices are **fixed prices** for the supply, in the currency as specified in the Purchase Order. They shall include packing, forwarding, loading and carriage to the place specified by the Purchaser and are inclusive of all applicable taxes, duties etc. except for those specifically agreed between the supplier and purchaser. The method of invoicing shall be without prejudice to the parties; agreement as to the place of performance. Invoices shall be submitted bearing the Purchase Order number & date, item number / s and supporting documents as called for in the Purchase Order.

As soon as each shipment is made in line with the delivery schedule specified in the purchase order, the supplier shall send **one set of Original documents and three (3) sets of photocopies** each of the following documents to the address indicated below by courier service.

- i. Commercial Invoice
- ii. Delivery Challan
- iii. Packing List
- iv. BEML's Inspection clearance document(s), material test certificates and other applicable quality documents pertaining to the supplies.

Postal Address

The Deputy General Manager,
Metro Purchase Department
BEML, Bangalore Complex,
PB No.7501, New Thippasandra post,

20. PROGRESS REPORT:

The supplier shall regularly inform the progress of work and in such form as may be called for by the Purchaser from time to time. The submission and acceptance of such reports shall not prejudice the rights of the Purchaser in any manner.

21. QUALITY & WORKMANSHIP:

The stores supplied shall be of the best quality and Workmanship shall be in strict conformity with all the drawings and specifications furnished with the Purchase Orders and shall answer to the description in all respects. All supplies shall be accompanied by supplier's works inspections / test certificates duly certifying, the Stores are in strict conformity with the drawings / specifications. However, final acceptance will be subject to inspection and approval at BEML works. Once the materials are rejected and communicated to the supplier, no request shall be entertained for re-inspection or acceptance of the stores. However, BEML reserves the right to re-inspect the stores and consider acceptance at its discretion.

22. QUALITY, CONDITION OF DELIVERY:

The Supplier shall guarantee that the delivery is of good quality and free from all defects and in the case of services rendered that they are performed by skilled personnel and that new materials are used. The Supplier shall guarantee that the delivery corresponds exactly with the provisions of the agreement, the reasonable expectations of Purchaser regarding the characteristics, quality and reliability of delivery. The Supplier guarantees that the delivery is suitable for the purpose for which it is intended by its very nature or which is evident from the specifications listed and from the order.

The Supplier shall guarantee that the delivery complies with legal requirements applicable in India and other (international) Government regulations, as applicable. The supplier shall guarantee that the delivery complies with the customary norms and standards in the relevant branch of trade or industry. The supplier shall be responsible for compliance with applicable technical, safety, quality, environmental requirements and other regulations in relation to his product, packaging, and raw and ancillary materials.

23. SUPPLY OF SAMPLE: (if applicable)

The Contractor shall produce samples of all materials and shall obtain approval before he places bulk order for the material for incorporation in the works. In respect of materials for which samples are not kept or detailed specifications is not given hereinafter, such materials shall comply with the latest relevant Indian Standard Specifications a published up to the date of issue of this tender. The Contractor shall on demand produce original receipts vouchers/invoices in respects of materials supplied by him.

24. INSPECTION, TESTING & CONSEQUENCE OF REJECTION:

The goods and stores shall be of approved design and each part /component may be inspected and tested by the Purchaser prior to shipment and shall fully comply with relevant requirements of purchaser.

Purchaser has the right to inspect the delivery. In the event of rejection, Purchaser shall inform the Supplier accordingly and Purchaser shall be entitled to replacement or repair at its discretion or may proceed to terminate or annul the agreement. All this does not affect Purchaser's right to compensation.

In case the goods / stores are rejected at the time of inspection at BEML or the rejections are noticed at the time of further processing the supplier will be informed of these rejections. On receipt of this information the supplier shall immediately arrange to collect the rejected items at his cost and risk and arrange for the replacement of goods within the shortest possible time. Under no circumstances the supplier shall compel the Purchaser to rework the rejected goods.

Wherever the supplier has not collected the rejected items within 60 days from the date of intimation, BEML shall have the right to dispose the goods and all cost related to the cost of material, statutory levies incurred both in procurement and disposal shall be recovered from the supplier from any of the bills that are due. The supplier shall have no claims whatsoever against the Purchaser for such disposal.

Purchaser or his authorized representative shall be entitled at all reasonable times during execution to inspect, examine and test at the Supplier's premises the material and workmanship of all stores to be supplied under the Contract, and if the part of the stores are being manufactured at other premises the Supplier shall obtain Purchaser's or his authorized representative's permission to inspect, examine and test as if the said stores are being manufactured at the Supplier's premises. Such inspection, examination and testing, if made shall not release the Supplier from any obligation under the Contract.

All costs related to inspections and re-inspections shall be borne by the Supplier. The cost of inspection staff / third party specified by the Purchaser shall be borne by Purchaser, unless otherwise specifically agreed. Whether the Contract provides for tests on the premises of the Supplier or any of his Sub-contractor/s, Supplier shall be responsible to provide assistance such as, labour, materials, electricity, fuels, stores, apparatus, instruments as may be required and as may be reasonably demanded to carry out such tests efficiently. Cost of any type test or such other special tests shall be borne by the Purchaser only if specifically agreed.

The supplier shall give the authorized representative of the Purchaser reasonable prior notice in writing of the date on and the place at which any stores will be ready for inspection / testing as provided in the Contract.

25. RAW MATERIALS ARRANGEMENT:

The supplier shall make his own arrangement to procure all raw materials required and BEML shall not be responsible for any assistance in such procurement or whatsoever.

26. IDENTIFICATION OF ITEMS / PIECES:

The supplier shall indicate / emboss / engrave, suitable identification marks (Viz. BEML stock number, supplier code number, batch no. etc.,) on each item/piece (or) on all components at convenient non-machinable place as per drawing, wherever applicable.

Also, shall indicate BEML part number, PO No. and date in all delivery documents, invoices and correspondence, wherever applicable.

27. PACKING AND MARKING:

- a) Packing to be in such a way that it should avoid transit/storage/handling damage.
- b) The supplier shall package the deliveries safely and carefully and pack them suitably in all respects considering the peculiarity of the material for normal safe transport by Sea / Air / Rail/ Road to its destination suitably protected against loss, damage, corrosion in transit and the effect of tropical salt laden atmosphere. The packages shall be provided with fixtures / hooks and sling marks as may be required for easy and safe handling by mechanical means.
- c) The packing, shipping, storage and processing of the delivery must comply with the prevailing legislation and regulations concerning safety, the environment and working conditions. Items packed with raw / solid wood packing material shall be treated as per ISPM – 15 (fumigation) and accompanied by Phytosanitary / Fumigation certificate. If safety information sheets exist for a delivery or the packaging, the Supplier must always supply these sheets direct (at the same time).
- d) Supplier shall indicate approximate net weight, gross weight and dimension of the package to enable BEML to determine the mode of dispatch. The packing should withstand the weather conditions during transit. The packing should not damage the contents in the package while transporting and handling. The safety and handling precautions should be clearly marked on the packages. The packing should be easily transportable without any damage. Each consignment should have individual packing list.
- e) Marking shall include the following information in sequence on the frame commensurate with the size of package.

**To: M/s. BEML Limited, Bangalore Complex,
New Thippasandra,
Bangalore – 560075,
Karnataka State, India.**

Purchase order number:

Shipper's mark:

Package number:

Identification number:

Caution marks, if applicable:

Net weight, gross weight and cubic measurement, whichever is appropriate for the shipment.

28. APPLICABLE LAWS AND JURISDICTION OF COURTS:

Indian laws both substantive and procedure, for the time being in force including modifications thereto, shall govern Contract. The competent Indian courts of shall have sole jurisdiction over disputes between purchaser and the Supplier.

29. JURISDICTION:

Courts of Bangalore alone shall have jurisdiction to decide any issue / dispute arising out of the Arbitration or this Purchase Order in exclusion of all other Courts. However, jurisdiction of any other court may be accepted by mutual discussion and agreement by and between BEML and the Supplier.

30. ARBITRATION:

Any disputes and differences that may arise between the parties in connection with this Agreement/Contract shall be settled by the parties amicably by way of mutual discussion / negotiation / conciliations. In case parties fail to settle the dispute amicably, then the dispute or difference shall be referred to India International Arbitration Centre for resolution. The Arbitration Tribunal shall consist of Sole / three Arbitrator /s. The Arbitrator /s shall be appointed and Arbitration proceeding shall be conducted in accordance with the provision of India International Arbitration Centre (Conduct of Arbitration) Regulations, 2023.

During Arbitration, “Supplies under this Purchase Order, if reasonably possible, may continue by mutual agreement during the dispute / Arbitration proceedings”

31. INTELLECTUAL PROPERTY RIGHTS; LICENSES:

If any Patent design, trademark or any other intellectual property rights apply to the delivery or accompanying documentation, Purchaser shall be entitled to the legal use thereof free of charge by means of a non-exclusive, worldwide, perpetual license. All intellectual property rights that arise due to the execution of the delivery by the Supplier and by its employees or third parties involved by the Supplier for performance of the agreement belong to Purchaser. The Supplier shall be obligated to do everything necessary to obtain or establish the above-mentioned rights. The Supplier guarantees that the delivery does not infringe on any of the intellectual property rights of third parties. The Supplier shall also be obligated to do everything necessary to obtain or establish the alternate acceptable arrangement pending resolution of any (alleged) claims by third parties.

The Supplier shall defend and indemnify BEML against any claims, costs or expenses incurred by reason of any infringement of alleged infringement of any letters, patent, registered design, trademarks or trade name by the use of sale of the stores / goods /material and against all costs or damages which BEML may undergo in legal action for such infringement or for which the BEML may become liable in any such action.

The supplier shall at all times indemnify BEML and shall take all risk of accidents or damage which causes a failure of the supply. The supplier shall comply with the provisions of Contract Labour (Regulation and Abolition) Act, 1970 and the Contract Labour (Regulation and Abolition) Central Rules 1971-as modified from time to time wherever applicable and shall also indemnify the Company from and against any claims under the aforesaid Act and the Rules.

32. BRIBES AND GIFTS:

Any bribe, commission, gift or advantage given, promised or offered by or on behalf of the supplier or his partner, agent or servant or anyone on his or their behalf to any officer, servant, representative or agent of BEML or any person on his or their behalf in relation to the obtaining or to the execution of or any other contract with BEML shall in addition to any criminal liability which the supplier may incur, subject the supplier to the cancellation of the PO and all other contracts with BEML and also to payment of any loss or damage resulting from any such cancellation to like extent as is provided in case of cancellation under **Clause-15** hereof. Any question or dispute as to the committing of any offence under the present clause shall be settled by BEML in such manner and on such evidence of information as they may think fit and sufficient and their decision shall be final and conclusive.

33. FORCE MAJEURE CLAUSE:

Notwithstanding anything contained in the Contract, neither the Supplier nor the Purchaser shall be held responsible for total or partial non-execution of any of the contractual obligations, shall the obligation become unreasonably onerous or impossible due to occurrence of a 'Force Majeure' conditions which directly affect the obligations to be performed by the Purchaser or the Supplier. Such events include war, military operations of any nature, blockages, revolutions, insurrections, riots, civil commotions, insurgency, sabotage, acts of public enemy, fires, explosion, epidemics, quarantine restrictions, floods, earthquake, or acts of God, restrictions by Govt. authorities over which the Supplier or the acts on which the Purchaser has no control.

The party claiming to be affected by Force Majeure shall notify the other party in writing without delay, within two weeks on the intervention and on the cessation of such circumstance. Extension of time sought by the Supplier along with supporting evidence and so granted by the Purchaser for the supply / work affected, if any, shall not be construed as waiver in respect of remaining deliveries. In the case of vendor seeking Force Majeure then it is discretion of BEML to consider the same based on authenticated documents.

Notwithstanding above provisions, Purchaser shall reserve the right to cancel the order/ Contract, wholly or partly, in order to meet the overall delivery schedule and make alternative arrangements including arrangements with third party for completion of deliveries and other schedules. Purchase may takeover partly processed material at a mutually agreed price.

34. FALL CLAUSE:

- a) The prices charged for the stores supplied under this P.O by the supplier shall in no event exceed the lowest price at which the supplier sells the stores of identical description to any other BEML Office / Division during the pendency of this PO.
- b) If at any time, during the said period, the supplier reduces the sale price of such stores or sells such stores to any other BEML Office / Division at a price lower than the price chargeable under this P.O and the price payable under this PO for the stores supplied after the date of coming into force of such reduction shall stand correspondingly reduced.

35. NON-DISCLOSURE AND INFORMATION OBLIGATIONS:

The supplier shall provide Purchaser with all information pertaining to the delivery in so far as it could be of importance to Purchaser. The Supplier shall not reveal confidential information to its own employees not involved with the tender / Contract & its execution and delivery or to third parties. The supplier shall not be entitled to use the Purchaser's name in advertisements and other commercial publications without prior written permission from Purchaser.

36. ASSIGNMENT OF RIGHTS AND OBLIGATIONS; SUBCONTRACTING:

The supplier is not permitted to sub-contract the delivery or any part thereof to third parties or to assign the rights and obligations resulting from this agreement in whole or in part to third parties without prior written permission from Purchaser. Any permission or approval given by the Purchaser shall, however, not absolve the supplier of the responsibility of his obligations under the contract.

37. DIVISION OF PATRONAGE:

BEML at its discretion reserves to issue order 100% on L1. BEML reserves the right to avail the price offered for full quantity of the tender or part thereof or ignore the offer completely without assigning any reason whatsoever.

38. INTEGRITY PACT:

The bidder / contractor should upload duly signed & stamped **Integrity Pact** (if the tender value is more than or equal to Rs.1.00 crore) as per prescribed format (**APPENDIX- A**) on plain paper as part of technical bid.

The bidder should put their authorized signature in the Integrity pact as a Contractor / bidder with their company seal along with witness's signature, name & address. **The agreement shall be in full as per format enclosed on a plain A4 size paper duly signed & stamped on all pages.**

The Integrity Pact envisages an agreement between the prospective tenderer and the buyer committing the persons/officials of both the parties not to exercise any corrupt influence on any aspect of the contract.

For the successful bidder, the integrity pact will remain valid up to 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded.

The Central Vigilance Commission (CVC) has appointed Shri Kasividyasagar & Shri Lt. Gen. Abhay Krishna as Independent External Monitor (IEM) to oversee the implementation of the Integrity Pact.

Address of IEM is as below:-

E-bid no:6300039536

Shri Kasividyasagar, IAS (Retd.)

House no. 55,

Dream valley gated community,

Manikonda, Hyderabad – 500089.

Mobile no. +91 9771407778

Email : kasividyasagar@gmail.com

Shri Lt. Gen. Abhay Krishna , (Retd.)

4A-902, Gurjinder Vihar,

AWHO Township, Sector CHI-1

Greater Noida, UP - 201310

Mobile no: +91 9871234353

Email: abhayabk@gmail.com

39. GST TERMS & CONDITIONS:

1. The Supplier is required to comply with all the applicable provisions of the GST Laws/Rules/Notifications/Circulars and to furnish required documents/details within the prescribed time limit to enable BEML to claim the benefits of GST Input Tax Credit or any other benefit.
2. The Supplier is required to furnish proper Invoice/Supplementary Invoice/Debit Note/Credit Note in the form and manner prescribed under GST Laws/Rules/Notifications/Circulars containing all the particulars mentioned therein and within the prescribed time limit as per prevailing GST Laws/Rules/Notifications/Circulars. In case of non-compliance by the Supplier, BEML shall not make any payment towards GST against such invoice until it is complied with within the timeline prescribed under GST Laws/Rules/Notifications/Circulars, and also subject to BEML being in a position to avail GST Input Tax Credit as per applicable GST Laws/Rules/Notifications/Circulars.
3. In case of discrepancy in the data uploaded by the Supplier in the GSTN portal or in case of any shortages or rejection in the supply, BEML will notify the Supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue Credit note (details to be uploaded in GSTN portal) for the shortages or rejections in the supplies, within the prescribed time limit to enable BEML to avail GST Input Tax Credit.
4. In case, the availment of GST Input Tax Credit by BEML is delayed for any reason other than those attributable to BEML, interest at applicable rate as prescribed under GST Laws/Rules/Notifications/Circulars for such delays shall be recovered from the Supplier.

5. In case Supplier delays declaring such invoice in his GST Return and GST Input Tax Credit availed by BEML is denied or reversed subsequently as per GST Laws/Rules/Notifications/Circulars, GST amount paid by BEML towards such reversal as per GST Laws/Rules/Notifications/Circulars shall be recoverable from Supplier along with applicable interest.

If BEML has not paid/short paid to the Supplier for any invoices within the time limit prescribed under GST Laws/Rules/Notifications/Circulars due to non-compliance of GST Laws/Rules/Notifications/Circulars by Supplier or any other reason attributable to Supplier and leads to any GST Input Tax Credit reversal by BEML, any losses/expenses/cost/penalty, etc., incurred by BEML shall be recoverable from the Supplier.

6. Wherever applicable, BEML will have the right to deduct “Tax Deducted at Source” at the rate prescribed under the GST Laws/Rules/Notifications/Circulars and to remit the same to the Government
7. In case of supplies made under Reverse Charge Mechanism, the Supplier needs to comply with the provisions under the GST Laws/Rules/Notifications/Circulars in terms of supply of Goods/Services and raising of invoice, so as to enable BEML to remit applicable GST to Govt., within the prescribed time limit and avail GST Input Tax Credit on the same. If the Supplier fails to comply with the above and as a result if BEML incurs any losses/expenses/cost/penalty, BEML shall be entitled to recover the same from the Supplier. Further the Supplier has to mention that “the liability of payment of GST amounting to Rs is on the Recipient of Service” in the invoice raised on BEML.
8. The Supplier is required to comply with the E-Way Bill Provisions under GST Laws/Rules/Notifications/Circulars. If the Supplier fails to comply with the said provisions and as a result if BEML incurs any losses/expenses/cost/penalty, BEML shall be entitled to recover the same from the Supplier.
9. In case of materials/goods issued to Supplier for Job Work, the Job Work Supplier is required to return the goods within the time limit prescribed in the Purchase Order. If the Job Work Supplier fails to return the goods as above, BEML will be entitled to raise a GST Supply Invoice on the Job Worker Supplier with applicable interest as per the provisions of GST Laws/Rules/Notifications/Circulars. In such cases, BEML will be entitled to recover all such GST/interest on GST /losses/expenses/cost/penalty, etc. incurred by BEML along with interest from the Job Work Supplier. Further in such cases where the GST invoice has been raised by BEML, on return of such goods after the prescribed time limit, the Job Work Supplier needs to return the same under GST invoice.
10. The Supplier have the option to give one Bank Guarantee of appropriate value after considering his estimated value of GST involved in invoices raised on BEML instead of Bank Guarantee for each Contract/Invoice. In case of payment through LC, suitable provisions/clause will be inserted while opening LC to ensure compliances of above conditions. However, if at any point of time value of such Bank Guarantee falls short of GST plus interest thereof, Supplier will have to either furnish Bank Guarantee for Differential value or such shortfall value of Bank Guarantee vis-à-vis GST plus interest thereof shall be withheld till Suppliers fulfils its obligations specified under above clauses.

BEML will be entitled to recover all losses/expenses/cost/penalty, etc. incurred by BEML along with applicable interest from the Supplier due to reasons other than those attributable to BEML.

11. If the Supplier is a Composition/Unregistered Dealer, the Supplier needs to comply with the provisions under the GST Laws/Rules/Notifications/Circulars in terms of supply of Goods/Service and raising of invoice. In case, the Supplier fails to comply with the above and as a result if BEML incurs any losses/expenses/cost/penalty, BEML shall be entitled to recover the same from the Supplier along with applicable interest.

40. TAX CLAUSE:

Any tax and/or duty, which may hereafter be imposed outside India, shall be on Supplier's account. **On the other hand, any tax and/or duty, which may hereafter be imposed in India, shall be on BEML's account.** Notwithstanding the foregoing, tax on supervising fee and/or other training fees shall be on Supplier's account, however, it shall be withheld and paid by BEML in India on behalf of Supplier according to provisions of the corporation tax law, the local inhabitant tax law and convention between Republic of India and the respective Suppliers country, for the avoidance of double taxation and the prevention of fiscal evasion with respect to taxes on income.

Where the government of the supplier's country exempts goods in export from any or all of such taxes, levies, duties on imports, the supplier shall charge the purchase price, which are exclusive of and free from such taxes, levies, and duties on imports.

Any downward revision in taxes or duties imposed in supplier's country should be informed and that benefit should be passed on to the BEML.

Any increase in statutory levies during the period wherein supplier has defaulted to effect supplies as per delivery schedule indicated in contract has to be borne by the supplier.

HSN CODE/CHAPTER ID and SAC Code details are to be indicated against each item.

TDS (Tax deducted at source) will be applicable for service purchase orders and will be deducted as per law of land. SAC (Service Account code) shall be indicated for the services /NRC that will be carried out by the supplier.

41. PROJECT IMPORT REGISTRATION:

Customs duty on input content imported by domestic bidders to manufacture tendered items.

Chennai Metro Rail Project is eligible for the concessional rate of custom Duty under chapter 98.01 of Custom Tariff Act for Project Import registration mode. In case if an indigenous supplier imports some items from outside India, the firm has to register with customs for availing concessional rate of duty i.e. 7.5% BCD plus cess, through project import registration mode.

To avail the concessional customs duty benefit, Bill of Material (BOM) of such imported material in the prescribed template (containing part number, description, qty,

price, source of supply, mode of shipment – Air/Sea, port of arrival etc.,) should be submitted by bidders to BEML within 02 months from finalization of the contract for obtaining PIR sponsoring letter from CMRL. The PIR sponsoring letter should be registered by the bidders with the concerned Customs Authorities at designated Port of Arrival.

The supplier shall maintain details of concessional Custom Duty deposited with the authority and submit the following for reimbursement of Custom Duty: -

- i) Bills of Entry
- ii) Challan for deposit of Custom Duty
- iii) Declaration that the Sub-contractors/Sub-vendors have neither claimed the deemed export benefit nor they will claim the same.

42. INSURANCE:

BEML has insured the Material being procured and the risk Coverage under the MCE policy shall commence from the moment of the first goods/consignments are lifted, mechanically or manually or otherwise, from anywhere in the world for loading onto the transport (all modes included) and remain in force during transit up to BEML's works and designated CMRL depot available till handing over of trainset with 24 months DNP/DLP.




43. RETENTION MONEY:

Retention money shall be deducted at the rate of 5% against each Invoice value of PO upto cumulative value equal to 5% of the total Material PO value excluding taxes & duties. Firm to raise Invoice for 100% value indicating that 5% of the Invoice value shall be payable by BEML only after completion of DLP/DNP period of all the trainset.

Upon the request of the Supplier, the purchaser may release the withheld retention money on submission of Bank Guarantee for an equivalent amount in respective currencies from a public sector bank (PSB) of India or Scheduled Commercial Banks in India or any Japanese Bank as listed under Schedule of Commercial Banks by The Reserve Bank of India (RBI).

Retention amount shall be released upon completion of DLP period i.e, a period of 24 months from the date of taking over of last trainset (70th trainset) by end customer, CMRL

ANNEXURE – III: KEY DELIVERY DATES (CMRL)**ARE02A KEY DATE DELIVERY SCHEDULE****BANGALORE COMPLEX**

PROJECT	Activities	Order Qty on Hand	2026				2027												2028												2029														
			Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov				
Chennai Metro ARE02A	Delivery of cars @ Chennai	210	3	0	3	3	0	3	3	0	3	3	3	3	12	6	9	9	12	9	12	9	9	9	9	9	6	9	9	9	9	12	9	6											
	Testing & Commissioning of cars														3	3	3	3	3	3	3	6	9	12	9	12	6	6	9	9	9	18	9	9	6	9	9	12	9	6	9	6			
																										CMC of 15 years will start by Oct-2031 and end by Sep-2046																			
																																													
			Red denote Key Date 																																										
			2026				2027												2028												2029														
			Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov				

Manuals delivery

Red denote Key Date

Note

CMC: The Contractor is required to carry out 15 years Comprehensive Maintenance Contract (CMC) for Rolling Stock which shall commence years after the TOC date of 70th Trainset and shall end after 15 years from start

DLP/RS: Shall start from the date of issuance of Takingover Certificate (TOC) for the 1st trainset and the fleet DNP / DLP ends two years after the TOC date of the 70th TS

DLP/M&P: Shall start on the TOC date of the respective equipment item and will ends two years after the TOC date of the last equipment

Total RS DLP period required spares & manpower support for 1st TS = 51 months

70th TS = 24 months

DLP varies from 1st TS to 70th TS

(To be executed on plain paper and applicable for all tenders of value _ Rs. 1 Crore and above)

INTEGRITY PACT

Between

**BEML Limited (BEML) hereinafter referred to as
“The Principal”**

And

**..... hereinafter referred to as
“The Bidder/Contractor”**

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for

.....
The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness / transparency in its relations with its Bidder(s) and / or Contractor(s). In order to achieve these goals, the Principal will appoint an independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 – Commitments of the Principal

(1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

- a) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- b) The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- c) The Principal will exclude from the process all known prejudiced persons.

(2) If the principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or it there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 – Commitment of the Bidder(s)/ contractor(s)

- (1) The Bidder(s)/ Contractor(s) commit themselves to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
 - a) The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 - b) The Bidder(s)/ Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
 - c) The Bidder(s)/ Contractor(s) will not commit any offence under the relevant IPC/PC Act; further, the Bidder(s) / Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or documents provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d) The Bidder(s)/ Contractor(s) of foreign origin shall disclose the name and address of the Agents/ Representatives in India, if any. Similarly, the Bidder(s)/ Contractor(s) of Indian Nationality shall furnish the name and address of the foreign Principals, if any. Further, as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is placed at **Appendix (A-1)**.
 - e) The Bidder(s) / Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or any other form such as to put his reliability or creditability in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or act as per the procedure mentioned in the "Guidelines on Banning of business dealings".

Section 4 – Compensation for Damages

- (1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the contract value or the amount equivalent to Performance Bank Guarantee.

Section 5 – Previous Transgression

- (1) The Bidders declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprises in India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in “Guidelines on Banning of business dealings”.

Section 6 – Equal treatment of all Bidders /Contractors /Sub-contractors

- (1) The Bidder(s)/ Contractor(s) undertaker(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- (2) The Principal will enter into agreement with identical conditions as this one with all Bidders, Contractors and subcontractors.
- (3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 – Criminal charges against violating Bidder(s) / Contractor(s) / Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or of the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer

Section 8 – Independent External Monitor / Monitors

- (1) The Principal appoints competent and credible Independent External Monitor for this Pact.

The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement

- (2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. It will be obligatory for him to treat the information and documents of the Bidders/Contractors as confidential. He

reports to the CMD, BEML.

- (3) The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Subcontractor(s) with confidentiality.
- (4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non- binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (6) The Monitor will submit a written report to the CMD, BEML, within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise submit proposals for correcting problematic situations.
- (7) If the Monitor has reported to the CMD, BEML, a substantiated suspicion of an offence under relevant IPC/PC Act, and the CMD, BEML has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- (8) The word 'Monitor' would include both singular and plural.

Section 9 – Pact Duration

This pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by CMD of BEML

Section 10 – Other provisions

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Corporate Office of the Principal, i.e. Bangalore.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed

by all partners or consortium members.

- (4) Should one or several provisions of this agreement turn out to be invalid, the reminder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- (5) The bidder shall not approach the Courts while representing the matters to IEMs and he/ she will await their decision in the matter.
- (6) In case of joint venture, all the partners of the joint venture should sign the Integrity Pact. In case of sub-contracting, the Principal contractor shall take the responsibility of the adoption of IP by the sub-contractor. It is to be ensured that all sub- contractors also sign IP.
- (7) In the event of any dispute between the management and the contractor relating to those contracts where Integrity Pact is applicable, in case, both the parties are agreeable, they may try to settle dispute through mediation before the panel of IEMs in a time bound manner. If required, the organization may adopt any mediation rules for this purpose.

In case, the dispute remains unresolved even after mediation by the panel of IEMs, the organization may take further action as per the terms and conditions of the contract.

The fees / expenses on dispute resolution shall be equally shared by both the parties.

- (8) In the event of any contradiction between the Integrity Pact and its Annexure, the Clause in the integrity pact will prevail

(For & On behalf of the Principal)

(For & On behalf of Bidder/Contractor)

(Office Seal)

(Office Seal)

Place-----

Place-----

Date -----

Date -----

Witness 1:
(Name & Address)

Witness 1:
(Name & Address)

Witness 2:
(Name & Address)

Witness 2:
(Name & Address)

Appendix A-1

(Applicable Agents / Suppliers to Sign, Seal & Upload / Submit)

GUIDELINES FOR INDIAN AGENTS OF FOREIGN SUPPLIERS

- 1.0 There shall be compulsory registration of agents for all Global (Open) Tender and Limited Tender. An agent who is not registered with BEML LTD shall apply for registration in the prescribed Application-Form available on www.bemlindia.in.
- 1.1 Registered agents will file an authenticated Photostat copy duly attested by a Notary Public/Original certificate of the principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission/remuneration/salary/ retainer ship being paid by the principal to the agent before the placement of order by BEML LTD.
- 1.2 Wherever the Indian representatives have communicated on behalf of their principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e. Principal) before finalizing the order.
- 2.0 DISCLOSURE OF PARTICULARS OF AGENTS/ REPRESENTATIVES IN INDIA, IF ANY:
 - 2.1 Tenderers of Foreign nationality shall furnish the following details in their offer:
 - 2.1.1 The name and address of the agents/representatives in India, if any and the extent of authorization and authority given to commit the Principals. In case the agent/representative be a foreign Company, it shall be confirmed whether it is real substantial Company and details of the same shall be furnished.
 - 2.1.2 The amount of commission/remuneration included in the quoted price(s) for such agents/representatives in India.
 - 2.1.3 Confirmation of the Tenderer that the commission/ remuneration if any, payable to his agents/representatives in India, may be paid by BEML LTD in Indian Rupees only.
 - 2.2 Tenderers of Indian Nationality shall furnish the following details in their offers:
 - 2.2.1 The name and address of the foreign principals indicating their nationality as well as their status, i.e, whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents/representatives.
 - 2.2.2 The amount of commission/remuneration included in the price (s) quoted by the Tenderer for himself.
 - 2.2.3 Confirmation of the foreign principals of the Tenderer that the commission/remuneration, if any, reserved for the Tenderer in the quoted price (s), may be paid by BEML LTD in India in equivalent Indian Rupees on satisfactory completion of the Project or supplies of Stores and Spares in case of operation items.
- 2.3 In either case, in the event of contract materializing, the terms of payment will provide for payment of the commission /remuneration, if any payable to the agents/representatives in India in Indian Rupees on expiry of 90 days after the discharge of the obligations under the contract.
- 2.4 Failure to furnish correct and detailed information as called for in paragraph-2.0 above will render the concerned tender liable to rejection or in the event of a contract materializing, the same liable to termination by BEML LTD. Besides this there would be a penalty of banning business dealings with BEML LTD or damage or payment of a named sum.

Signature

(For & On behalf of Bidder/Contractor)

(To be submitted along with Technical bid)

**COMPLIANCE REPORT FOR PROCUREMENT TECHNICAL SPECIFICATION
(PTS)**

Compliance to PTS GR/TD/7071 (Latest Revision)				
PTS Clause No	Description	Complied	Not Complied	Remarks
1. Introduction	1.1. General			
	1.2. Trainset Configuration			
	1.3. Climatic & Environmental Conditions			
	1.4. Vehicle Performance Requirements			
	1.5. Car Dimensions			
2. Definitions and Abbreviations	2.1 Definitions			
	2.2 Abbreviations			
3. Precedence of Documents				
4. Qualification Criteria				
5. Standards				
6. Design Criteria				
7. Technical Requirements	7.1. General			
	7.2. Standards			
	7.3. Proven Design (ERTS-RS Clause 5.1)			
	7.4. Technical Characteristics of Floor Covering			
	7.5. Floor Covering Joint Sealer			
	7.6. Floor Covering Adhesive			
	7.7. Floor Covering Removal			
	7.8. Weight			
	7.9. Workmanship and Finish			
	7.10. Quality Assurance Program			
8. Scope of Supply	8.1. General			
	8.2. Scope of Work			
	8.3. Floor Covering, Logo and Joint Sealer			
	8.4. Tools			
	8.5. Floor Covering Cleaning			
	8.6. Training			
	8.7. Submission of Samples			
	8.8. Packing			
	8.9. Design Warranty			
	8.10PTS Compliance			

9. Testing and commissioning	9.1. General			
	9.2. Test Planning & Procedure			
	9.3. Test Reports			
	9.4. Equipment Type Test & Routine Test			
	9.5. First Article Inspection (FAI)			
	9.6. Installation and Commissioning			
10. Warranty				
11. Appendices				
12. Submittals with Technical Offer				

Authorized signatory with company seal / stamp

COMPLIANCE REPORT OF GENERAL TERMS & CONDITIONS

(To be submitted along with Technical Bid)

Bid Invitation No :**Firm** :**Item details** :

Sl. No.	Terms / Clause	Complied	Not Complied	Remarks
1.	GLOSSARY, DEFINITIONS & INTERPRETATIONS			
2.	SUBMISSION OF THE TENDER			
3.	SUPPLIERS SHARING LAND BORDER WITH INDIA			
4.	PREFERENCE TO MAKE IN INDIA			
5.	DELIVERY TERMS			
6.	PAYMENT			
7.	PRICE BID VALIDITY			
8.	FIRM PRICE			
9.	INSPECTION			
10.	WARRANTY			
11.	PERFORMANCE BANK GUARANTEE (PBG)			
12.	RIGHT TO VARY QUANTITIES & QUANTITY OPTION CLAUSE			
13.	LIQUIDATED DAMAGES CLAUSE			
14.	RISK PURCHASE CLAUSE			
15.	SECRECY AND CONFIDENTIALITY			
16.	AUTHORITY OF PERSONS SIGNING DOCUMENT			
17.	ACCEPTANCE OF ORDER			
18.	OTHER CONDITIONS			
19.	PRICE, INVOICING AND PAYMENT			
20.	PROGRESS REPORT			

Authorized signatory with company seal / stamp

COMPLIANCE REPORT OF GENERAL TERMS & CONDITIONS

(To be submitted along with Technical Bid)

Bid Invitation No :**Firm** :**Item details** :

21.	QUALITY & WORKMANSHIP			
22.	QUALITY, CONDITION OF DELIVERY			
23.	SUPPLY OF SAMPLE (If Applicable)			
24.	INSPECTION, TESTING & CONSEQUENCE OF REJECTION			
25.	RAW MATERIALS ARRANGEMENT			
26.	IDENTIFICATION OF ITEMS / PIECES			
27.	PACKING AND MARKING			
28.	APPLICABLE LAWS AND JURISDICTION OF COURTS			
29.	JURISDICTION			
30.	ARBITRATION			
31.	INTELLECTUAL PROPERTY RIGHTS; LICENSES			
32.	BRIBES AND GIFTS			
33.	FORCE MAJEURE CLAUSE			
34.	FALL CLAUSE			
35.	NON-DISCLOSURE AND INFORMATION OBLIGATIONS			
36.	ASSIGNMENT OF RIGHTS AND OBLIGATIONS; SUBCONTRACTING			
37.	DIVISION OF PATRONAGE			
38.	INTEGRITY PACT			
39.	GST TERMS & CONDITIONS			
40.	TAX CLAUSE			
41.	CUSTOMS DUTY ON INPUT CONTENT			
42.	INSURANCE			
43.	RENTION MONEY			

Authorized signatory with company seal / stamp

COMMITTEMENT TO SUPPLIES
(To be submitted along with Technical Bid)

This is to certify that we M/s against SRM tender No. as a Bidder commit that we will support BEML for requirement of any additional Equipment, Spares, Service required at the later stage ie from taking over of First trainset and up to completion of CMC by end customer CMRL for call the cars of contract Chennai Metro Rail Project-Phase II (ARE02A).

Authorized signatory with company seal / stamp

CONFIDENTIALITY AGREEMENT**(To be typed on plain paper and submitted along with the technical bid)**

This Confidentiality Agreement is made and entered into between M/s BEML, (hereinafter referred to as BEML), a Govt. of India Undertaking under Ministry of Defence, having its Registered Office at BEML Soudha, No.18/1, 4th Main, Sampangirama Nagar, Bangalore – 560 027 and M/s ----- (hereinafter referred as XXXX) having its Registered Office at..... M/s. BEML, has been patronizing XXXX for components / spares listed in Annexure hereto. A need has been felt to revitalize the business relationship for mutual advantage.

- 1) It is mutually, therefore, agreed that the following shall form part of the terms and conditions for continued business:
 - a) The supplier shall not divulge to anyone else except under the authority and for the purposed of BEML, all information such as technical data, specifications, drawings, models of specimens furnished / supplied by BEML for the purpose of manufacture or in connection with developmental activities, constitute the property of BEML and the supplier shall keep them in strict confidence. This has been explicitly stated in all the details to the supplier through Purchase Order / Drawings etc., released.
 - b) The supplier shall not supply the components / spares exclusively manufactured for BEML with the Technical Data / Specifications / assistance furnished by BEML and shall not disclose my initiations, development of adaptations thereof to anyone else except with the written consent of BEML.
 - c) BEML shall be entitled to prevent breach of the above and to claim damages in case of any breach. It is hereby mutually agreed that for breach of this agreement the Vendor shall pay, without actual proof of damages, a liquidated amount of Rs. 1.00 Crore (Rupees One Crore only).
 - d) **ARBITRATION:** Any disputes and differences that may arise between the parties in connection with this Agreement/Contract shall be settled by the parties amicably by way of mutual discussion / negotiation / conciliations. In case parties fail to settle the dispute amicably, then the dispute or difference shall be referred to India International Arbitration Centre for resolution. The Arbitration Tribunal shall consist of Sole / three Arbitrator /s. The Arbitrator /s shall be appointed and Arbitration proceeding shall be conducted in accordance with the provision of India International Arbitration Centre (Conduct of Arbitration) Regulations, 2018.
- 2) BEML shall be entitled to prevent breach of the above and to claim damages in case of any breach.
- 3) The Signatories hereto declare that they have the sanction and power to execute and deliver this binding agreement.

IN WITNESS WHEREOF, the parties hereto have set their respective hands to this Confidentiality Agreement on written in the presence of Witness.

For BEML**For M/s. XXXX****WITNESS:****1.****2.**

Land Border Sharing Declaration

(To be submitted in the bidder's letter head along with technical bid)

In-line with Department of Expenditure's (DoE) Public Procurement Division Order vide ref. F.No.6/18/2019-PPD dated 18.07.2020 & 19.7.2020 and subsequent orders.

Tender no.

Job:

"I/ we have read the clauses pertaining to Department of Expenditure's (DoE) Public Procurement Division Order (Public procurement no 1, 2 & 3 vide ref. F.No.6/18/2019-PPD dated 18.07.2020 & 19.7.2020) regarding restrictions on procurement from a bidder of a country which shares a land border with India. I/We hereby certify that I/ we the bidder < name of the bidder.....> is / are

a) Not from such a country and eligible to be considered for this tender.

OR

b) From such country, has been registered with the competent authority and eligible to be considered for this tender. (Evidence of valid registration by the competent authority shall be attached)

For and behalf of _____ (Name of the bidder)

(Signature, date & seal of authorized representative of the bidder)"

**DECLARATION REGARDING MINIMUM LOCAL CONTENT IN LINE WITH
REVISED PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA),
ORDER 2017 DATED 04TH JUNE, 2020 AND SUBSEQUENT ORDER(S)**
(To be typed and submitted in the Letter Head of the Entity/Firm providing certificate as applicable)

To,
BEML Limited, Bangalore

Dear Sir,

Sub: Declaration reg. minimum local content in line with Public Procurement (Preference to Make in India), Order 2017-Revision, dated 04th June, 2020 and subsequent order(s).

Ref : 1) NIT/Tender Specification No:
2) All other pertinent issues till date

We hereby certify that the items/works/services offered by..... *(specify the name of the organization here)* has a local content of _____ % and this meets the local content requirement for ‘**Class-I local supplier**’ / ‘**Class II local supplier**’** as defined in Public Procurement (Preference to Make in India), Order 2017-Revision dated 04.06.2020 issued by DPIIT and subsequent order(s).

The details of the location(s) at which the local value addition is made are as follows:

- | | |
|----------|----------|
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |
| ... | |
| ... | |
| ... | |

Thanking you,
Yours faithfully,

**(Signature, Date & Seal of
Authorized Signatory of the Bidder)**

** - *Strike out whichever is not applicable.*

Note:

1. Bidders to note that above format duly filled & signed by authorized signatory, shall be submitted along with the techno-commercial offer.
2. In case the bidder's quoted value is in excess of Rs. 10 crores, the authorized signatory for this declaration shall necessarily be the statutory auditor or cost auditor of the company (in the case of companies) or a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
3. In the event of false declaration, actions as per the above order necessary action will be taken against bidder.

Authorized signatory with company seal / stamp

CONTACT DETAILS OF THE SUPPLIER
(To be filled and submitted by supplier along with the technical bid)

1) Contact Person details in Marketing Office

- (a) Name :
(b) Designation :
(c) Telephone :
(d) Fax :
(e) Mobile :
(f) Email :

2) Head Office :**3) Complete address**

including the website :

4) Details of the proposed plant from

where item is to be supplied :

5) Complete address of the Plant

including Website :

6) Contact person details in plant

- (a) Name :
(b) Designation :
(c) Telephone :
(d) Fax :
(e) Mobile :
(f) Email :

7) Bank Details: (Will used during L/C Execution)

- a) Name of the Bank :
b) Full Address of the Bank :
c) Suppliers Account Number and Type :
b) IBAN No :
e) Swift Code :

APPENDIX – I**(DELIVERY SCHEDULE)****(To be submitted by the bidder along with the technical bid)**

Sl No	Part No / Description	Total Qty (Trainsets)	Schedule	No of Train Sets (3 Cars/TS)
1	Equipment with DNP/DLP	70 TS (210 cars)	Mar'26	1
			Jun'26	3
			Aug'26	3
			Jan'27	4
			Feb'27	4
			Mar'27	3
			April'27	3
			May'27	4
			June'27	3
			July'27	4
			Aug'27	3
			Sep'27	3
			Oct'27	3
			Nov'27	3
			Dec'27	3
			Jan'28	4
			Feb'28	4
			March'28	3
			April'28	4
			May'28	4
			June'28	4
3	Non-Recurring activities- Design and Submission of Design Documents	PDR: Jul-25 PFDR: Mar-26 FDR: Jun-26		
4	FAI Reports and Type Test & Report	Mar.26		

Note: a) Delivery schedule proposed above is tentative. However, it can be mutually discussed and agreed in line with key dates of CMRL contract.

c) 1 Trainset comprises of 2 DM car and 1 T car

Authorized signatory with company seal / stamp

PERFORMANCE BANK GUARANTEE

Bank Guarantee No.....
Dated
Amount
Valid upto
Claim upto

The General Manager (Materials- Management)
BEML
Bangalore Complex
PB No 7501
New Thippasandra
Bangalore 560075

1. This deed of Guarantee made this day of..... (Month& year) between Bank of..... (Hereinafter called the "Bank") of the one part, and BEML LIMITED (Hereinafter called "the Employer") of the other part.
2. Whereas BEML LIMITED has awarded the contract for..... (Name of work as per PO) (Hereinafter called the "Contract") to..... (Name of the Contractor) (Hereinafter called "the Contractor").
3. AND WHEREAS the Contractor is bound by the said Contract to submit to the Employer a Performance Security for a total amount of.....(Amount in figures and words).
4. Now, We the Undersigned.....(Name of the Bank) being fully authorized to sign and to incur obligations for and on behalf of and in the name of.....(Full name of Bank), hereby declare that the said Bank will guarantee the Employer the full amount of Rs. (Amount in figures and words) as stated above.
5. NOW THEREFORE, We hereby affirm that we are the Guarantor and responsible to you, on behalf of the Contractor and we hereby unconditionally, irrevocably and without demur undertake to immediately pay to the Employer upon first written demand and without cavil or argument, any sum or sums within limits of.....(Amount of Guarantee) as aforesaid without reference to the Contractor and without your needing to prove or show grounds or reasons for your demand for the sum specified therein. The Bank shall pay to the Employer any money so demanded notwithstanding any dispute/disputes raised by the Contractor in any suit or proceedings pending before any Court, Tribunal or Arbitrator/s relating thereto and the liability under this Guarantee shall be absolute and unequivocal.
6. This Guarantee is valid till.....(The initial period for which this Guarantee will be valid must be for at least 6-months (six months) longer than the anticipated expiry date of defect liability period / Warranty period as stated in Clause **10** of Annexure IV - Notice Inviting Tenders.
7. At any time during the period in which this Guarantee is still valid, if the Employer agrees to grant a time extension to the Contractor or if the Contractor fails to complete the Works within the time of completion as stated in the Contract, or fails to discharge himself of the liability or damages or debts as stated under Para 5, above, it is understood that the Bank will extend this

Guarantee under the same conditions for the required time on demand by the Employer and at the cost of the Contractor.

8. The Bank agrees that no change, addition, modifications to the terms of the Contract Agreement or to any documents, which have been or may be made between the Employer and the Contractor, will in no way release us from the liability under this Guarantee; and the Bank, hereby, waives any requirement for notice of any such change, addition or modification to the Bank.
9. The Guarantee here in before contained shall not be affected by any change in the Constitution of the Bank or of the Contractor.
10. The neglect or forbearance of the Employer in enforcement of payment of any moneys, the payment whereof is intended to be hereby secured or the giving of time by the Employer for the payment hereof shall in no way relieve the bank of their liability under this deed.
11. The expressions "the Employer", "the Bank" and "the Contractor" hereinbefore used shall include their respective successors and assigns.
12. Notwithstanding anything contained herein:
 - (a) Our liability under this Bank Guarantee shall not exceed Rs.....
(Rs.....)
 - (b) This Bank Guarantee shall be valid up to.....
 - (c) We are liable to pay the Guarantee amount or part thereof under this Bank Guarantee only & only if you serve upon us a written claim or demand on or before

In witness whereof I/We of the bank have signed and sealed this Guarantee on the.....day of..... (Month & year) being herewith duly authorized.

For and on behalf of theBank.

Signature of Authorized Bank officials.

Name :.....

Designation :

Stamp/Seal of the
Bank.....

Signed, sealed and delivered for and on behalf of the Bank by the above namedin the presence of:

Witness 1.

Signature.....
Name.....
Address.....


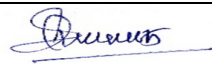
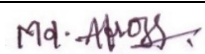
Witness 2.

Signature.....
Name.....
Address.....

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CMRL ARE02A Project

**Procurement Technical Specification
of Floor Covering, Wheelchair Logo and
Joint Sealer**

	Name	Date	Signature
Approved By	SHIVA KUMAR S B	09.05.2025	
Reviewed By	MANJUNATH S	09.05.2025	
Prepared By	AFROZE MD	09.05.2025	

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1. Introduction

1.1. General

- 1) This Procurement Technical specification (PTS) specifies the technical requirements of Floor Covering to be supplied for cars under Chennai Metro Phase 2 ARE02A Project to Chennai Metro Rail Limited (herein after CMRL).
- 2) The Floor Covering shall comply in all respects with CMRL Employer's Requirements Technical Specification (ERTS-RS).
- 3) BEML will carry out all required works and activities as Contractor to the Employer for CMRL ARE02A project, while the subcontractor shall be responsible for all works required in this PTS with regard to Floor Covering and shall be responsible for supporting the BEML activities as contractor for CMRL ARE02A project.
- 4) The scope of work covers design, development, testing, manufacture and supply of the Floor Covering, the training of Operation and Maintenance personnel of the owner on the Floor Covering. The OEM is required to support for CMC as per the scope mentioned in the document.
- 5) The scope of work includes all items of work which may be required to meet the performance requirements, trouble free and efficient operation of trains and meeting the best international practices even if not specifically mentioned in this PTS.
- 6) The trains shall be operated in 'GoA4'.

1.2. Trainset Configuration

1.2.1. Train Composition

The rake formation shall generally be as follows:

3 Car unit formation: DMC – TC – DMC

where,

DMC : Driving Motor Car
TC : Trailer Car

1.3. Climatic & Environmental Conditions

The proposed system shall meet the climatic and environmental conditions as set out in ERTS-RS clause 2.11.

Environmental conditions for the on-board equipment shall conform to EN 50125-1. The rake shall be capable of being operated, stored, and maintained at specified performance levels within the environmental conditions of the Chennai area as shown in Table below. Following points are listed for reference as a minimum.

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Condition	Maximum	Minimum
Climate	Tropical Wet, Dry, and humid	
Ambient temperature	45 °C	16 °C
Monsoons	October through December	
Rainfall	1333 mm average annual. (Very heavy/continuous with heavy lightning discharges).	
Relative humidity	100 % saturation during rainy season which may be as long as 3 ~ 4 months. Other times, 82 % humidity.	
Atmosphere during hot season	Extremely dusty	
Maximum wind speed	130 kmph	
SO2 level in atmosphere	5 ~ 40 micro g/m ³	
NOx level in atmosphere	10 ~ 40 micro g/m ³	
Respiratory Suspended Particles Matter in atmosphere (RSPM)	45 ~ 100 micro g/m ³	
Total Suspended Particles Matter in atmosphere (TSPM)	150 ~ 320 micro g/m ³	
Altitude	Sea Level	
Conditions in stations	All underground stations will be A/C. Above ground stations will have A/C for certain designated rooms only.	

Note:

1. The temperature of stationary rake exposed to sun for long periods may go as high as 70°C. The equipment shall not be adversely affected in any way due to exposure to such high temperatures.
2. As the Chennai Metro lines will have elevated and underground portions, there may be sudden change in the ambient temperature to rolling stock. The equipment shall be designed to take care of such thermal shocks.
3. The Rolling Stock must be able to operate regardless of the external conditions. They must also be so designed as to avoid abnormal wear due to adverse weather. They can be parked outdoors regardless of the atmospheric conditions.
4. The rakes shall be continuously exposed to highly corrosive, salty atmosphere along with industrial pollutants.
5. The equipment mounted on the under-frame shall be designed to permit propulsion of the train at 10 km/h through water up to a depth of 75 mm above rail level (with maximum allowable wheel and rail wear). Equipment shall be made splash proof in accordance with International Standards.
6. With maximum allowable wheel and rail wear, the rake must be able to operate

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successfully under the above conditions with no entry of moisture or other contaminants into any compartment, component, or device that could cause equipment on the rake to malfunction or be damaged; that could increase maintenance requirements; or that could cause premature wear or failure.

7. The Water used in Chennai for washing is likely to have a high level of dissolved matter which may aid corrosion.
8. Tunnel walls may be wet and seepage water will normally be present in the invert. Floor Covering must therefore be capable of withstanding the effects of seepage (if any) and continue to operate in such wet, humid & flood conditions.

1.4. Vehicle Performance Requirements

The proposed system shall meet the vehicle performance requirements as set out in ERTS-RS clause 2.14. Following details are listed for reference only as a minimum.

Item	Values
Maximum permissive design speed of the train	90 kmph
Maximum permissive speed in operation on tangent and level track	80 kmph
Declared Schedule Speed (DSSP), with fully loaded(AW3 condition)	32 kmph
Minimum Design Average Acceleration rate for fully loaded (seating plus standees @ 8 passengers /sq. m) train on level tangent track shall be as under: 0 kmph to 40 kmph 0 kmph to 60 kmph 0 kmph to 80 kmph	1.0 m/s ² 0.6 m/s ² 0.3 m/s ²
Minimum Operational Average Acceleration rate for (seating plus standees @ 6 passengers/sq. m) loaded train on level tangent track shall be as under: 0 kmph to 35 kmph 0 kmph to 60 kmph 0 kmph to 80 kmph	1.20 m/s ² 0.65 m/s ² 0.35 m/s ²
Minimum Average Service braking rate from 80 kmph to standstill for fully loaded (seating plus standees @ 8 passengers / m2) train on level tangent track	1.0 m/s ²
Minimum Average Service braking rate from 80 kmph to standstill for - (seating plus standees @ 6 passengers / m2) train on level tangent track	1.1 m/s ²
Minimum Average Emergency braking rate from 80 kmph to 0 kmph for fully loaded train on level tangent track	1.3 m/s ²
Jerk rate (Maximum)	0.75 m/s ³

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1.5. Car Dimensions

Dimension	Values
Length of DMC / TC / MC over coupler faces	22,600 mm
Width of car, overall	2900 mm
Wheel dimensions: New wheel diameter Wheel wear limit	860 mm 80 mm (on diameter)
Height of car floor above top of rail at door threshold	1,130 mm (maximum) 1,100 mm (minimum)
Spacing between bogie centrelines	15,000 mm

2. Definitions and Abbreviations

The following definitions and abbreviations are applicable to the PTS.

2.1. Definitions

- **“Employer”** means Chennai Metro Rail Limited (CMRL), its legal successors and assignees.
- **“Subcontractor”** means the Supplier who supplies the required Floor Covering to BEML for CMRL ARE02A project. Subcontractor shall carry out the works in accordance with ERTS (RS & CMC) with regard to Floor Covering.
- **“Contractor”** means the persons or person appointed by the Employer to undertake the execution of the works for CMRL ARE02A project. In order to avoid misunderstanding of the roles of the Contractor in ERTS (RS & CMC), the term “Contractor” shall be read as “Subcontractor” in ERTS (RS & CMC) for those ERTS (RS & CMC) clauses referred to in this PTS.
- **“Contract”** means the contract between Subcontractor and BEML in relation to the supply of Floor Covering for CMRL ARE02A project.
- **“Engineer”** means any person nominated or appointed from time to time by the Employer to act as the Engineer for the purposes of the Contract and notified as such in writing to the Contractor.
- **Project Manager or Employer’s Representative** means any person nominated or appointed from time to time by the Employer to act as the Project Manager/ Employer’s Representative for the purposes of the Contract and notified as such in writing to the Contractor.
- **“NIT”** means Notice Inviting Tender for Supply of Floor Covering for CMRL ARE02A Project issued by BEML.
- **“GTC”** means General Terms and Conditions for Floor Covering for CMRL ARE02A Project issued by BEML.

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- “**SCC**” means Special Contract Conditions for Supply of Floor Covering for CMRL ARE02A Project issued by BEML.
- “**BEML**” means the Contractor to procure the Floor Covering for CMRL ARE02A project.
- “**ERTS-RS**” means Employer’s Requirements Technical Specification – Rolling Stock for CMRL ARE02A project.
- “**ERTS-CMC**” means Employer’s Requirements Technical Specification - Comprehensive Maintenance Contract for CMRL ARE02A project.
- “**PTS**” means BEML’s Procurement Technical Specification.

2.2. Abbreviations

GOA	:	Grade of Automation
UTO	:	Unattended Train Operation
ERTS	:	Employer's Requirements Technical Specifications
FAI	:	First Article Inspection
ISO	:	International Standards Organization
ITP	:	Inspection Test Plan
NCR	:	Non-Conformance Report
RS	:	Rolling Stock
CMC	:	Comprehensive Maintenance Contract.

3. Precedence of Documents

- 1) The PTS shall be read in conjunction with the Notice Inviting Tender (NIT) General Terms and Conditions (GTC) & Special Contract Conditions (SCC) of the tender & ERTS (RS & CMC). To the extent that any provision of the PTS is inconsistent with any provision of the Commercial Specification, the provisions of the NIT shall prevail.
- 2) To the extent that any provision of NIT is inconsistent with any provisions of the ERTS (RS & CMC), the provisions of ERTS (RS & CMC) shall prevail.
- 3) This PTS in no way relieves the sub-contractor from any requirements specified in the technical specification. If a conflict is discovered among any of the above contract documents, the following order of priority shall govern:

Order of Precedence	Document title
1	ERTS (RS & CMC)
2	PTS
3	NIT/GTC/SCC

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- 4) The complete requirements are those found in the above documents. It shall be the subcontractor's responsibility to ensure that equipment, documentation, and services furnished against this PTS are in full compliance with all the above documents.
- 5) Also, in the event of any conflict among the requirements of particular parts of the PTS, ERTS-RS and NIT, the subcontractor shall seek clarification with BEML prior to making a contract. After making a contract, the subcontractor shall comply with BEML's Interpretation for any discrepancies.

4. Qualification Criteria

- 1) Subcontractor shall be an Original Equipment Manufacturer (OEM) of Floor Covering for Railway Metro Rolling stock having experience in design, manufacturing, testing and commissioning.
- 2) The subcontractor shall meet the qualification criteria as per vendor approval form for Floor Covering. The Proposed type of Floor Covering Manufactured and Supplied by the subcontractor should have been in use and have established their satisfactory performance and reliability on at least three Mass Rapid Transit Systems in commercial / revenue service over a period of three years or more (in each MRTS) either outside the country of origin in three different countries or in MRTS in India. Satisfactory Revenue service performance certificates for a period of 3 years or more from end users / Metro Operators for the above shall be submitted along with the technical offer.
- 3) Along with the technical offer, the subcontractor shall submit all the required documents for obtaining the vendor approval for Floor Covering as per vendor approval format enclosed at appendices. Selection of Vendor is subject to CMRL approval.
- 4) The subcontractor shall submit undertaking to provide the support during Testing & Commissioning, service trials, revenue service and DLP period either by themselves or through sister company or a partner in India. The subcontractor shall submit detailed proposal in this regard.
- 5) The subcontractor (OEM) shall provide ISO 9001-2015 / IRIS certification or equivalent international certification along with the technical offer and shall manufacture the products accordingly.
- 6) The subcontractor shall submit QAP (Quality Assurance Plan), ITP (Inspection Test Plan), company profile with infrastructure facilities, product range etc., along with technical offer
- 7) The subcontractor shall submit undertaking that technical support shall be provided during design stage, maintenance and repair work.
- 8) Subcontractor shall submit undertaking that if any repair of floor covering is required then the floor covering material required for the repair work will be provided by the subcontractor for a minimum period of 15 years from the date of last car handed over to CMRL by BEML.
- 9) Subcontractor shall submit undertaking that in case of any future procurement action by Employer, subcontractor will quote directly to Employer.

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5. Standards

The design, testing and manufacturing of the Floor Covering shall conform to the latest editions of internationally recognized Standards viz., Indian, American, European, Japanese, ISO, etc.

6. Design Criteria

The Floor Board proposed by the sub-contractor shall comply with the following design criteria as per ERTS-RS Clause 3.4.7 & 19.20 (extract of the ERTS-RS is attached at appendices).

- (i) Flooring shall remain non-slip and not present a hazard to passengers when wet. The transition between saloon floor, cab floor and gangway vestibule between cars shall be smooth and free from steps and unduly steep gradients, which would impede the flow of passengers between cars.
- (ii) The non-skid floor structure shall be floating floor type comprising of aluminium honeycomb sandwiched type or Composite floor boards or any other service proven material such that no repairs or replacement to the floor structure is required throughout the codal life of car shell, i.e., 35 years. The material of the floor structure shall be subject to CMRL's prior approval. Floor covering shall achieve low noise level inside the cars and shall be of less weight.
- (iii) The floor installation shall be continuous over the complete area of the saloon without floor traps, gaps, or holes. Either coving sections shall be provided between all floor and vertical sections or the floor coving should extend up into the side wall lining. At all door openings, the floor shall make a weather-tight connection. No opening in the sub-floor is permitted.
- (iv) The floor covering shall have a proven record of successful use in comparable railway applications; a service life of not less than 18 years shall be provided. Adhesion between floorboard and floor covering shall be appropriate and shall last for the lifetime of floor covering. There shall be no cases of floor covering peeling off from floorboard and the Contractor shall guarantee the same.
- (v) It shall be feasible to replace all, or sections of the floor covering and coving during the life of the train if necessary. The floor design shall allow the floor covering to be removed without damage to the floor sub-structure.
- (vi) The floor, and its mounting structure, shall be designed to withstand any loads that may be applied over 35 years in normal operation of metro train. Floor shall resist to a load of AW5 (650 kg/m²) and to a stamping effort of 35 daN on a surface of 25 mm².
- (vii) Floor covering material shall be laid with the minimum number of joints. Floor all be so arranged to ensure that the bend radius required at the plinth base does not coincide with a joint in the covering that will affect the visual continuity between the plinth and floor. Where joints occur, they shall not coincide with those of the floorboards. Joints shall be sealed against the

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- ingress of dirt, moisture and water. Any sealant used shall be coloured to match the background colour of the floor covering.
- (viii) The total floor structure shall provide an effective fire barrier for a minimum of 30 minutes as per BS 6853, or equivalent.
 - (ix) The sub-floor shall be insulated for anti-drumming and noise suppression.
 - (x) Floor covering shall show no significant signs of wear, abrasion test results shall be submitted.
 - (xi) Flooring shall remain colour fast under the following BS 1006:1990 conditions (like Light, Shampoo, Dry cleaning, Water spotting, Acid spotting, Alkali spotting, Rubbing, etc.). Flooring with minimum colour fastness according to EN ISO 4892-2 is also acceptable.
 - (xii) Flooring shall be easily cleaned with the minimum of effort using readily available cleaning agents meeting the requirements.
 - (xiii) Flooring shall not require glazing, polishing or any other post-production refinishing in short intervals to maintain its finish; the cleaning procedure shall be submitted.
 - (xiv) Flooring shall suit regular cleaning schedules and during service and shall not appear dirty between scheduled cleaning.
 - (xv) The flooring shall not be damaged or discoloured by materials usually encountered in depot or service use.
 - (xvi) The flooring shall have high abrasion resistance as per ISO-4649 and shall be compliant with relevant EN / ISO standards.
 - (xvii) Specific attention shall be paid to the design of complete floor system to eliminate floor swelling / bulging or floor contraction for the lifetime of the vehicle. Same shall be guaranteed by the Contractor.
 - (xviii) The floor covering shall be anti-slip, waterproofed and sealed, non-skid, resistant to wear and staining shall not trap dust, and shall be easily cleaned using conventional floor cleaning machines / methods and media. The Contractor shall propose suitable cleaning machines and liquid (with suitable local equivalent) and demonstrate the cleaning procedure to the satisfaction of CMRL and without any damage to flooring on long term basis. The floor covering shall meet the requirements of EN45545 part 1 to 7 Latest editions in respect of fire, smoke and toxicity. The Contractor shall ensure even, uniform and gapless joints.
 - (xix) The floor covering shall be a proven material and floor system used in various railways for similar applications and will be subject to CMRL approval.
 - (xx) The flooring shall be non-staining, non-discoloring and non-oil extended, and contain additives to preclude damage or discoloring to UV light.
 - (xxi) High-quality hard clay shall be used as a filler. No limestone shall be used in the compound.
 - (xxii) The rubber flooring shall be fully homogeneous throughout.
 - (xxiii) The rubber flooring material shall comply with FS-SS-T-312 and the flame and smoke test requirements of clause 19.61.
 - (xxiv) The Contractor shall submit color / material 3 samples for approval.

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- (xxv) Prior to the installation of the floor covering, any depressions, voids, or cracks in the sub-floor shall be filled and the sub-floor shall be leveled and smoothed with a CMRL approved levelling compound.
- (xxvi) Bottom side of the flooring shall be sanded and then securely bonded to the subfloor panels.
- (xxvii) The floor covering shall be permanently secured to the plymetal sub-floor with a CMRL approved adhesive and as recommended by the flooring manufacturer.
- (xxviii) The floor covering and adhesive shall be resistant to solutions and solvents normally encountered in rail transit service.

7. Technical Requirements

7.1. General

- 7.1.1. The subcontractor shall meet the floor covering requirements as per Design Criteria at Section-6 above, as a minimum.
- 7.1.2. The subcontractor shall support in all aspects in obtaining customer clearance of the proto type Floor Covering after successful completion of tests.
- 7.1.3. The floor covering and the joint sealer supplied shall comply with the environmental conditions and design criteria specified at clause 1.3 and 6 and the following technical requirements.

7.2. Standards

- 7.2.1. The floor covering supplied shall be in accordance with the requirements of the standards specified in this PTS. The subcontractor may propose an alternative equivalent international standard during the design stage. The acceptance of alternative standard will however be subject to review by BEML / CMRL When a Standard is referred to, it shall be assumed that the revision that is current during the design finalization shall be applicable, unless otherwise stated.
- 7.2.2. Where no standard is identifiable, the subcontractor shall make a proposal, based on the best international practice, which shall be subject to review by BEML / CMRL.
- 7.2.3. During the design phase, the subcontractor shall submit a consolidated list of all the standards that he intends to use for the design, manufacturing and testing and other phases of the contract, for review of BEML / CMRL.

7.3. Proven Design (ERTS-RS Clause 5.1)

- 7.3.1. The proposed Floor Covering by the sub-contractor against this PTS shall satisfy the "Proven Design" as per vendor approval form. The proposed Floor Covering shall have been in use and have established its satisfactory performance and reliability with revenue service over a period of three years or more (in each MRTS).
- 7.3.2. The subcontractor shall manufacture and supply the Floor Covering only from such manufacturing units that have supplied the Floor Covering that fulfill the proven

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design requirements as above.

7.3.3. The subcontractor shall be fully responsible, for the suitability, adequacy, integrity, durability and practicality of the proposed Floor Covering. The subcontractor shall warrant that the subcontractor's Proposals meets the Employer's Requirements and is fit for the purpose thereof. Where there is any inadequacy, insufficiency, impracticality or unsuitability in or of the Employer's Requirements or any part thereof, the subcontractor's Proposal shall take into account, address or rectify such inadequacy, insufficiency, impracticality or unsuitability at subcontractor's own cost;

7.3.4. The subcontractor shall warrant that the Works have been or will be designed, manufactured, installed and otherwise constructed and to the highest standards available using proven up-to-date good practice.

7.4. Technical Characteristics of Floor Covering

Sl. No.	Technical Characteristic	Test Method	Requirement
1	Material	ISO 17257	Rubber, Homogenous with same composition, color and speckles throughout the thickness. Shall be free of PVC, Halogens, asbestos & Phthalate. Identification of rubber by ISO 17257.
2	Visual Inspection	-	Free from visual defects (pinholes, blisters, porosity, blow holes, tear, wrinkles, lumps and other visual defects)
3	Colour and speckles	As per approved sample.	Dual Colour requirement: Middle Roll: Colour-A Side Rolls: Colour-B Vendor shall propose 3 colour combinations, out of which one combination shall be confirmed with CMRL approval.
4	Surface	As per approved sample.	Embossed
5	Length	-	22000 mm, +50, -0
6	Width	-	Middle Roll = 1200 mm +10, -0
			Side Roll = 800 mm, +10, -0
7	Thickness	EN ISO 24346	3 ± 0.15 mm

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Sl. No.	Technical Characteristic	Test Method	Requirement
8	Weight	ISO 23997	$\leq 4.7 \text{ kg/m}^2$
9	Hardness	ISO 7619	83 ~ 93 Shore A
10	Residual indentation	ISO 24343-1	$\leq 0.20 \text{ mm}$
11	Abrasion resistance	ISO 4649 (Method A - 5N)	$\leq 200 \text{ mm}^3$
12	Dimensional stability	EN ISO 23999	$\pm 0.4 \%$
13	Slip resistance	EN 16165 Annex B	R9
14	Resistance to cigarette burns	EN 1399	Method A ≥ 4 Method B ≥ 3
15	Flexibility	ISO 24344 Method A. (Mandrel dia. 20 mm)	No fissuring
16	Tensile strength	ISO 37, Type A	$\geq 6 \text{ MPa}$
17	Tensile elongation	ISO 37, Type A	$\geq 150\%$
18	Tear strength	ISO 34	$\geq 35 \text{ N/mm}$
19	Colour fastness to artificial light	ISO 105-B02 Method 3	≥ 6 on the blue scale, ≥ 3 on grey scale
20	Noise Attenuation	ISO 10140-3	Actual Measured
21	Effect of chemicals (minimum 8 substances)	ISO 26987	Resistant
22	Static electrical propensity	EN 1815	$\leq 2 \text{ KV}$, antistatic
23	Fire Safety	EN 45545-2, R10	HL3
24	Thermal Conductivity	EN 12667 / EN 12664	Actual Measured
25	Gross Heat of Combustion	ISO 1716	Actual Measured
26	Heat Release Rate	ISO 5660-1	Actual Measured

The subcontractor shall submit the technical description and technical data sheet of the floor covering meeting the above Table.

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7.5. Floor Covering Joint Sealer

- 7.5.1. A proven floor cover joint Sealer, suitable for the sub-contractor's floor covering, shall be proposed by the sub-contractor. The colour of the sealer shall match with floor covering. Supporting documents for provenness of the proposed sealer, the project references where the proposed sealer has been successfully used and the technical data sheet of the joint sealer shall be submitted along with the technical offer.
- 7.5.2. The proposed sealer shall be suitable for application in Indian climatic conditions. The sub-contractor shall confirm its suitability for Indian climatic conditions and submit the test report along with the technical offer.

7.6. Floor Covering Adhesive

- 7.6.1. The adhesive proposed by the contractor for installation of floor covering will be Adesilex G12 or Adesilex G19FR of M/s. Mapei / Ceresit K 188 of M/s. Henkel / D-5250NF(SP) of M/s. Daehung Chemical Co., Ltd.

7.7. Floor Covering Removal

- 7.7.1. If any floor covering repair work to be carried out, the floor covering removal shall not damage the floor board. The subcontractor shall submit the detailed floor covering and adhesive removal procedure along with the technical offer.

7.8. Weight

- 7.8.1. To minimise energy costs, great importance will be placed on achieving practical designs of minimum car weight whilst meeting specified structural and performance requirements. **Accordingly, the weight of the Floor Covering shall be kept to a minimum. The total weight of Floor Covering shall not exceed by more than +4% of the estimate weights.**
- 7.8.2. The subcontractor shall submit estimated weight for Floor Covering along with the technical offer.

7.9. Workmanship and Finish

- 7.9.1. The subcontractor shall ensure that after completion of installation of the floor covering by the contractor the floor covering shall be free from pinholes, blisters, porosity, blow holes, tear, wrinkles, lumps and other visual defects that would impair usability of the floor covering. The floor covering bottom surface shall be suitable for adhesive bonding.

7.10. Quality Assurance Program

7.10.1. General

The subcontractor shall hold ISO 9001-2015/ IRIS certification and shall manufacture the product accordingly. The subcontractor shall submit a copy of ISO 9001 / IRIS certification along with the offer. The subcontractor shall monitor and control the Quality systems as per ISO 9001 / IRIS guidelines. BEML and/or CMRL's representative may periodically conduct compliance audits of the Subcontractor's Quality management system.

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7.10.2. **Quality assurance plan**

The subcontractor shall submit Quality Assurance Plan (QAP) based on ISO 9001-2015 / IRIS guidelines during the preliminary design phase.

8. **Scope of Supply**

8.1. **General**

The subcontractor shall be responsible for the scope of supply of the Floor covering, logo and joint sealer along with the tools required for the proper installation of the floor covering, as a minimum., which shall comprise, unless specifically excluded,

- Design, manufacture, testing, delivery and rectification of defects.
- Supply of tools, required for the 15 years comprehensive maintenance of cars in sufficient quantities.
- Documentation and support material associated with the operation and maintenance of the floor covering.
- Technical support and rectifying the defects and deficiencies as communicated by the CMRL / BEML.
- Training of engineers, operations and maintenance staff including providing the training materials, training kits and demonstration.
- operations and maintenance manuals for review and acceptance by the BEML/CMRL.

Note: If any special tools / equipment are required for installation of Floor Covering, the subcontractor shall supply 3 nos. of such equipment at subcontractor own cost.

8.2. **Scope of Work**

Sl. No.	Scope of Work	
	Sub-Contractor	BEML
1	Supply of following, <ul style="list-style-type: none"> • Floor Covering. • Wheelchair logo • Joint Sealer. 	Receiving and storing of floor covering, wheelchair logo and joint sealer

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Sl. No.	Scope of Work	
	Sub-Contractor	BEML
2	<ul style="list-style-type: none"> Sub-contractor to provide installation training for 4 cars. Sub-contractor to submit the floor cover installation procedure. 	<ul style="list-style-type: none"> Floor covering installation will be done by BEML.
3	<ul style="list-style-type: none"> Sub-contractor to provide Operation and Maintenance training to the satisfaction of BEML / CMRL staff. Sub-contractor to submit the Operation and Maintenance manual for the floor covering. 	<ul style="list-style-type: none"> BEML has to carry out the maintenance of the rolling stock for period of 15 years as Defect Liability and Maintenance Period (DLMP). The DLMP shall start after commencement of revenue service of the first train and shall end 15 years after the start of revenue service of last train. There are 70 trainsets.
4	<ul style="list-style-type: none"> Subcontractor to provide the clause-by-clause compliance during the pre-final design stage. 	<ul style="list-style-type: none"> BEML has to submit the design documents conforming to the ERTS-RS applicable for the floor covering. As per the contract the design process is made into three stages. <ul style="list-style-type: none"> (i) Preliminary Design. (ii) Pre-final Design. (iii) Final Design. <p>As per the contract to BEML by CMRL, during the pre-final design stage, BEML need to submit clause by clause compliance of the applicable clause of the ERTS-RS from the OEM of the sub-system.</p> <p>The applicable ERTS-RS clauses for the floor covering are covered in this PTS. However, any additional requirements by CMRL will be informed to the subcontractor and subcontractor to comply the same without any additional cost implication after the placement of the purchase order.</p>

8.3. Floor Covering, Logo and Joint Sealer

8.3.1. Floor Covering Colour

Floor Covering shall have dual colour, Middle Roll: Colour-A and Side Rolls: Colour-B. Subcontractor shall propose 3 colour combinations, out of which one colour combination shall be selected and approved by BEML/CMRL. BEML /

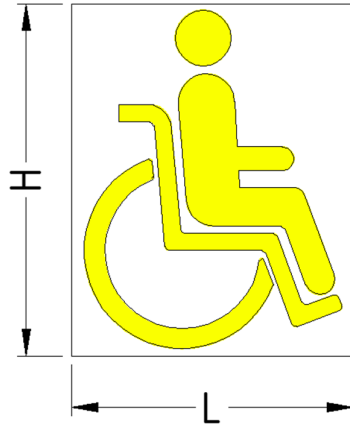
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CMRL approval for the floor covering colors, surface pattern and speckles is mandatory. Any changes to these parameters as required by BEML / CMRL shall be adhered by the sub-contractor without any additional cost implication.

8.3.2. Logo

The subcontractor shall supply wheelchair logo as shown in the below image.

Tentative Wheelchair Logo, Size (L) 320mm x (H) 400 mm. The wheelchair with human logo colour to be yellow and other area colour to be same as floor covering colour. The final size (L x H) and colour of the wheelchair Logo shall be confirmed by BEML/CMRL. Any changes to these parameters as required by BEML / CMRL shall be adhered by the sub-contractor without any additional cost implication.



8.4. Tools

The supplier shall supply three complete sets of tools required for installation of the floor cover, along with the first supplies of the floor cover at subcontractor cost. The list of tools shall be submitted along with the technical offer.

8.5. Floor Covering Cleaning

Due to heavy dusty environmental conditions, lot of abrasive dust gets accumulated on the floor within short time and gets stick to floor covering. Floor covering shall be easily cleaned with the minimum of effort using readily available cleaning agents meeting the requirements.

Flooring shall not require glazing, polishing or any other post-production refinishing in short intervals to maintain its finish; the cleaning procedure shall be submitted.

Flooring shall suit regular cleaning schedules and during service and shall not appear dirty between scheduled cleaning.

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The flooring shall not be damaged or discoloured by materials usually encountered in depot or service use.

Sub-contractor shall propose suitable cleaning machines and liquid and demonstrate the cleaning procedure to the satisfaction of BEML/CMRL and without any damage to flooring on long term basis.

The technical specifications of the cleaning machine and the cleaning solution shall be submitted along with the technical offer.

8.6. Training

The sub-contractor shall impart training to BEML personnel on proper installation of the floor cover in the first 3 cars.

8.7. Submission of Samples

The sub-contractor shall submit 5 no. of A4 size samples for colour, speckles and embossed surface reference meeting the technical requirements of this PTS, for BEML / CMRL approval. The approved colour, speckles and embossed surface shall be followed for the supplies by the subcontractor. The approved sample will be representative of the floor covering to be supplied after award of contract.

8.8. Packing

The Supplier shall pack properly in order that in transit and after supply of the floor covering to the place allocated by BEML, no damage to the floor covering shall occur. In the packing details the shelf life and of the floor covering and joint sealer to be clearly indicated.

8.9. Design Warranty

The sub-contractor shall warranty the Floor covering for a minimum of 20 years of Design life.

8.10. PTS Compliance

The subcontractor shall offer a valid and fully compliant proposal for the Floor Covering as detailed in this PTS. The subcontractor shall submit compliance report for all the clauses of PTS with regard to Floor Covering.

The subcontractor shall submit, along with the technical offer, the Clause-by-Clause Compliance for the PTS as follows:

- Complied: "Complied" shall be indicated by the subcontractor where the subcontractor is able to comply with the clause.
- Noted: Where a clause merely provides information

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Offers with Non-compliance and deviations to any of the PTS clauses with regard to Floor Covering, are liable for rejection.

9. Testing and commissioning

9.1. General

- The subcontractor shall submit Inspection and Testing Plan according to the technical requirements.
- Individual cars and complete trains will be type and routine tested in accordance with IEC 61133.
- The Floor Covering shall be type- and routine-tested in accordance with detailed respective test procedures to be drawn up by subcontractor and agreed by BEML/CMRL which shall take into account the requirements of respective international standards and this PTS and test programme drawn up by the subcontractor to demonstrate that the floor covering meet the specified technical requirements. The test plan shall be approved by BEML/CMRL.
- All such tests shall be carried out at the subcontractor's cost, wherever performed, in the presence of and to the satisfaction of BEML/CMRL, who reserves the right to witness any or all of the tests.
- Wherever any equipment, system or sub-system is not specifically covered by an internationally recognized specification or test procedure, or where the type and routine tests prescribed by IEC or other international standard do not adequately cover the requirement, tests which are acceptable both to the subcontractor and to BEML/CMRL, shall be devised.
- Type tests may be waived if these were carried out earlier on floor covering of identical design, witnessed by a reputed organization, and the service performance of such equipment was found to be reliable. The subcontractor shall submit a proposal in this regard to BEML/CMRL for review. The waiver of Type Test is entirely at the discretion of BEML/CMRL.
- Change of manufacturing place may require re-type test.
- BEML /CMRL reserves the right to witness any or all of the tests, and to require submission of any or all test specifications and reports. BEML/CMRL reserves the right to reasonably call for additional tests as are considered necessary. BEML/CMRL may, if considered necessary, call for conducting optional tests as per relevant standards without any additional cost to BEML/CMRL. In case of repetition of tests, as decided by BEML/CMRL, entire cost including that of BEML/CMRL representative(s) shall be borne by the subcontractor.
- The results of all tests shall be submitted to BEML/CMRL, who will record his conclusions as to whether or not the floor covering being tested has

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passed satisfactorily.

- The Subcontractor shall be responsible for undertaking and passing all necessary testing activities for Floor Covering.
- **All tests essential for Safety Certification and technical clearance of Metro systems by CMRS shall be carried out for Floor Covering by the subcontractor and test reports as per the format insisted by CMRS shall be submitted.**
- Prior to the start of testing, BEML & CMRL shall have all approved test plans and procedures for the test and all relevant prerequisite testing shall have been completed by subcontractor.
- All test & inspection specifications and reports including all repair activities and check-lists shall be submitted to and approved by BEML/CMRL.

9.2. Test Planning & Procedure

The subcontractor shall submit detailed test procedures for each test for the review of BEML/CMRL. The test procedure shall include the following information:

- Relevant specification applicable to each of the test.
- Type, routine and special test to be carried out.
- Description of the test, scheduled date, and locations of the test.
- Test parameters to be measured.
- Constraints to be applied during the test.
- Defined pass / fail criteria
- Facilities, equipment, and test and measurement tools.

Test procedures shall be amended, as required throughout the duration of the Contract, to reflect changes in system design or the identification of additional testing requirements.

BEML / CMRL shall have the access to monitor all tests and have access to all test records.

For each of the identified tests, the subcontractor shall produce a test report, in three copies, and in an approved format, within an agreed period following the test, for acceptance by the BEML / CMRL. The subcontractor shall sign all reports of Tests. BEML / CMRL reserves the right to reasonably call for additional tests if considered necessary.

9.3. Test Reports

- 1) All test reports for Floor Covering shall be prepared by the subcontractor and they shall be submitted to BEML/CMRL. The Test reports shall include, but not be limited to, the followings:

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- (a) The reference to the corresponding Test Procedure
 - (b) The date of the test was executed
 - (c) Description of any test conditions, input data, or tester actions
 - (d) Details of test instruments used (Make, Model) along with calibration certificate.
 - (e) The test results for each test including a Passed / Failed indication
 - (f) Identification of the Subcontractor's test engineer
 - (g) Action and the result of the action for comments by the Engineer
 - (h) Copies of any deficiency reports generated as a result of the execution of the correction.
 - (i) Configuration data that fully describes the hardware and software that was tested, including software version and identifiers for every software module
- 2) Written reports of all tests performed shall be submitted within 2 weeks of test performance to BEML/CMRL for acceptance.
 - 3) Records of all inspection and testing shall be kept completely by the Subcontractor and available to the Engineer during the performance of this subcontract and for a minimum of ten (10) years after expiration of the warranty period.
 - 4) All test reports shall be certified and signed by an approved member of the Subcontractor's staff. The subcontractor shall prepare and submit a separate deficiency report, if there is a problem during tests

9.4. Equipment Type Test & Routine Test

The Floor Covering shall be type and routine tested in accordance with relevant standard and specifications at ISO 17025 accredited laboratory (subcontractor own laboratory or external laboratory) at subcontractor own cost.

Submission of test reports of previously executed projects will not be accepted. Subcontractor to be very clear that such test report will be considered only as a reference. The subcontractor has to carry out all the tests freshly for CMRL ARE02A project and shall comply accordingly for the type tests and routine tests. Subcontractor failing to comply for carrying out fresh type tests and routine tests will be liable for tender disqualification.

The subcontractor shall carryout the following type tests and routine tests as a minimum and shall submit the reports.

Sl. No.	Kind of Test	Test Method	Type Test	Routine Test
1	Material	ISO 17257	✓	✓
2	Visual Inspection	-	✓	✓

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Sl. No.	Kind of Test	Test Method	Type Test	Routine Test
3	Colour and speckle	As per approved sample	✓	✓
4	Embossed Surface	As per approved sample	✓	✓
5	Length	-	✓	✓
6	Width	-	✓	✓
7	Thickness	EN ISO 24346	✓	✓
8	Weight	ISO 23997	✓	✓
9	Hardness	ISO 7619	✓	✓
10	Residual indentation	ISO 24343-1	✓	✓
11	Abrasion resistance	ISO 4649 (Method A - 5N)	✓	✓
12	Dimensional stability	EN ISO 23999	✓	✓
13	Slip resistance	DIN 51130	✓	✓
14	Resistance to cigarette burns	EN 1399	✓	✗
15	Flexibility	ISO 24344 Method A. (Mandrel dia. 20 mm)	✓	✓
16	Tensile strength	ISO 37, Type A	✓	✓
17	Tensile elongation	ISO 37, Type A	✓	✓
18	Tear strength	ISO 34	✓	✓
19	Colour fastness to artificial light	ISO 105-B02 Method 3	✓	✓
20	Effect of chemicals	ISO 26987	✓	✓
21	Static electrical propensity	EN 1815	✓	✗
22	Noise Attenuation	ISO 10140-3	✓	✗
23	Fire Safety	EN 45545-2, R10 for HL-3	✓	✗
24	Heat Release Rate	ISO 5660-1	✓	✗
25	Gross Heat of Combustion	ISO 1716	✓	✗
26	Thermal Conductivity	EN 12667 / EN 12664	✓	✗

✓ – to be carried out

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× - not required

The type test procedure document shall be prepared by the sub-contractor and BEML / CMRL approval shall be obtained before conducting the tests.

The routine test reports shall be submitted along with every batch of supplies.

9.5. First Article Inspection (FAI)

The subcontractor shall offer the Floor Covering for First Article Inspection by BEML/ CMRL in accordance with the Engineer approved FAI plan prior to serial production in order to confirm that the item produced fully complies with the technical specifications, System design and manufacturing process.

The Subcontractor shall ensure that the produced Floor Covering is compliant to all requirements prior to inviting for testing and FAI. The pre-test result prior to official testing/FAI shall be submitted with the invitation letter to request Engineer's witness.

At the FAI, the subcontractor shall make available all pertinent design and manufacturing process documentation, test records, material certifications, etc.

During FAI, if any inspections or tests indicate that specific hardware or documentation does not meet the specified requirements, the appropriate items shall be repaired, replaced, upgraded, or added by the Subcontractor at their own cost, as necessary to correct the noted deficiencies. After correction of deficiency, all tests necessary to verify the effectiveness of the corrective action shall be repeated.

If FAI has to be repeated due to non-compliances/ deficiencies noticed, the cost towards the same and the cost towards BEML/CMRL visit to subcontractor's place for witness of re-FAI shall be to subcontractor's responsibility.

Upon acceptance of the FAI by End User, the subcontractor is then free to proceed to manufacture all pertinent hardware. The hardware must meet or exceed the quality standards set at the FAI, and must incorporate any comments made by End User at the FAI.

Subcontractor shall note that the Engineer FAI clearance will not relieve the subcontractor's responsibility towards design, production, quality, reliability, availability, maintainability and safety of the systems and sub-systems during the revenue service.

9.6. Installation and Commissioning

After the Floor Coverings are delivered, the subcontractor shall depute his Engineer for the installation and commissioning training of the Floor Covering on the First 3 cars.

Modifications/ corrections, if any, shall be carried out by the subcontractor at his own cost.

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10. Warranty

As per GTC (General Terms and Conditions).

11. Appendices

1. Vendor Approval form.
2. Technical offer Submittals Check List.
3. ERTS-RS extract
4. Drawings.

12. Submittals with Technical Offer

The Subcontractor shall provide as a minimum, the following along with the technical offer.

1. Complete Technical Offer for floor covering, wheelchair logo, joint sealer including technical description.
2. Technical data sheet of floor covering, logo, joint sealer, installation tools and depot floor cleaning machines and cleaning liquids.
3. Fire safety test report copies of earlier similar projects.
4. Installation and maintenance guide for the floor cover.
5. Supporting documents for Qualification Criteria compliance. (Clause 4)
6. Vendor approval Documents including QAP, ITP, company profile with infrastructure facilities, product range etc., (Clause 4)
7. Clause-wise compliance report against the PTS.
8. Dully filled vendor credential form along with supporting documents.
9. Submittals check-list.