JAIPUR METRO RAIL CORPORATION LTD.

"QR Ticketing Implementation in AFC System of Phase-1A & Phase-1B of Jaipur Metro Rail Corporation Ltd."



Jaipur Metro Rail Corporation Ltd.

Admin Building, Mansarovar Metro Train Depot, Bhrigu Path, Mansarovar, Jaipur (Rajasthan) – 302020. Website: http://transport.rajasthan.gov.in/jmre

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SECTION 1

NOTICE INVITING BID (NIB):- JMRC/O&S/S&T/NIB/2024-25/02

1.1 GENERAL

- Jaipur Metro Rail Corporation invites Request for proposal through Open tender (Single Stage Two envelope) "QR Ticketing Implementation in AFC System of Phase-1A & Phase-1B of Jaipur Metro Rail Corporation Ltd.", through e-tendering process.
- i. The complete bid document can be downloaded from the state e-procurement website https://www.eproc.rajasthan.gov.inand interested bidders will have to submit their offer in electronic formats both for technical and financial proposal on this website only with their digital signatures. The complete bid document can also be seen on Corporation's website https://transport.rajasthan.gov.in/jmrcand state procurement portal i.e., https://sppp.rajasthan.gov.in/
- ii. Bidders who wish to participate in this bidding process must register on https://eproc.rajasthan.gov.in. To participate in online Bids, as per Information Technology Act, 2000, Bidders will have to obtain Digital Signature Certificate (DSC) from any agency approved by Controller of Certifying Authorities (CCA). Bidders, who already have a Valid Digital Signature certificate, need not to obtain a new Digital Signature Certificate. This DSC will be used to submit the bid online by the bidder. Please note that a pre-bid meeting of prospective bidders is scheduled as per the details specified below. The objective of this meeting is to address the queries of the prospective bidders related to the Work/Bidding document.

1.1.2 The key details of the NIB are as follows:

KEY DETAILS

a.	Name of Work and NIB No.		"QR Ticketing Implementation in AFC System of Phase- 1A & Phase-1B of Jaipur Metro Rail Corporation Ltd." JMRC/O&S/S&T/NIB/2024-25/02	
b.	Approximate Cost of work (Inclusive GST)	•	Rs. 2,22,96,191/- (inclusive GST)	
C.	Bid Security Amount	:	Rs. 4,45,924/- (2% of Estimated Cost) (in form of Demand Draft / Bankers Cheque or Bank Guarante payable in favour of Jaipur Metro Rail Corporation Limited.	
d.	Cost of Bid form (Non Refundable)	į	Rs. 5,900/- (Rs. 5000 + including 18 %GST) Rs. Two Thousand Three Hundred Sixty Only), (Non- refundable) by Demand draft/Banker Cheque payable in favour of Jaipur Metro Rail Corporation Limited.	
e.	E - Tender Processing Fee (Non - Refundable)		Rs. 2000/- in form of demand draft/ Banker's cheque payable in favour of 'Managing Director, RISL' payable at Jaipur)	
f.	Performance Security		10 % of the contract amount in the form of Banker's Cheque / Demand Draft/ Bank guarantee of a Scheduled Commercial Bank in	

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		1 11	favour of "Jaipur Metro Rail Corporation Ltd." payable at Jaipur.	
g.	Online Bid Document availability period	4:10	From date 15/05/2024 time 17:00 hrs To date 13/06/2024 time 17:00 hrs	
h.	Online Bid Document submission period	•	From date 04/06/2024 time 10:00 hrs To date 13/06/2024 time 17:00 hrs	
i.	Date & Time of opening of Online Technical Bid	26' l	Date 14/06/2024 time 12:30 hrs (Access to online technical bid and its download shall be carried out at the Office of ED (S&T)).	
j.	Date and Time of opening of online Financial Bid*	e i ·	Will be intimated later to technically qualified bidders through e-mail/phone/website of	
k	Venue and Last Date and Time of physical submission of Cost of Bid Form, Bid Security, Processing Fee and notarized Form-F on non-	rankl	Director (O&S), JMRC, 3 rd Floor, Admin Building, Mo Depot, Bhrigu Path, Mansarovar, Jaipur-302020. Date 13/06/2024 up to 17:00 hrs	
200	judicial stamp paper of Rs. 100.	100	11:30 Hrs. dated 31/05/2024	
	Date and Time of Pre Bid meeting (Online meeting link will be shared to prospective bidders who request for online pre bid meeting vide e-mail mentioned in this NIB)			
	Date and time of uploading of pre bid meeting clarifications		18:00 Hrs. dated 03/06/2024	
m	TI 1'1'L of Did	:	90 days from the last date of submission of Bid.	
n.	a 1 the married	:	180 days from the date issue of LOA with 2 year	
	Minimum Eligibility Criteria	:	As per clause-1.3	
p.	la de minos for	100	Venue:- Jaipur Metro Rail Corporation Ltd. Chinta Room, 2nd Floor, Admin Building, Mansarovar Depo Bhrigu path, Mansarovar, Jaipur-302020	

1.2 POINTS TO BE NOTED

- 1.2.1 The Bid papers consist of the following documents, along with their annexure, appendices, addenda and errata if any.
 - Volume 1
 - Notice Inviting Bid (NIB)
 - Instructions to Bidders (ITB)
 - Volume 2
 - General Conditions of Contract(GCC)/JMRC
 - Volume 3
 - Bill of Quantities.

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Note: Approved GCC is uploaded and available on the JMRC website, By Signing the Bid document, firm agrees to accept the GCC.

The Bidders may obtain or clarify further information in respect of these Bid documents from the office of Director (O&S), Jaipur Metro Rail Corporation Ltd, 3rd Floor, Admin Building, Metro Depot, Bhrigu path, Mansarovar, Jaipur-302020., Email: dos@jaipurmetrorail.in, edst@jaipurmetrorail.in, mgrtel@jaipurmetrorail.in.

All Bidders are hereby cautioned that Bids containing any material deviation or reservation and / or minor deviation without quoting the cost of withdrawal shall be considered as non-responsive and shall be summarily rejected. Jaipur Metro Rail Corporation reserves the right to accept or reject any or all proposals without assigning any reasons. No Bidder shall have any cause of action or claim against the Jaipur Metro Rail Corporation for rejection of his proposal.

- 1.3 Minimum Eligibility criteria: The bidder should meet all the eligibility criteria as mentioned below:
 - (a) The bidder should have not been debarred either by procuring entity or State Govt. in pursuance to the process of debarment specified in RTPPR, 2013. Firm shall submit an undertaking to this effect as per Form-P.
 - (b) Bidder should have valid GST registration certificate issued by competent authority and shall enclose GST certificate along with bid submission.
 - (c) Bidder should have valid PAN certificate/ card issued by the Income Tax Dept. of GOI and enclose PAN certificate.
 - (d) Registration certification of the firm / partnership deed / Certificate of incorporation. Etc.
 - (e) Work Experience :- (Similar Work specific experience)*
 - i. The Experience in design, development and implementation or upgradation of Automatic Fare Gates system hardware and software for Metro Rail Project/Light Rail in the role of Prime Contractor (single entity or JV/Consortium member) or in the capacity of Specialist Subcontractor* and must have substantially completed in the last 5 (Five) years prior to last date for submission of bid.

*Specialist Sub-contractor is the one who is the OEM of Automatic Gates (Hardware and Software) and has supplied whole Automatic Gates to various Metro Rail Project/Light Rail Project.

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- ii. A copy of Proof of experience in the form of Purchase Order/Work Order as per Form-T-II shall be submitted by the bidder.
- iii. The participating firm shall provide Satisfactorily Work Completion report duly signed by Authorised signatory during last 5 financial period and current financial year up to the previous month from the date of Bid opening.
- iv. The bidder firm should have satisfactorily and successfully completed similar nature of work as mentioned in Clause d(i) during last five financial years up to the previous month from the date of Bid opening and should be either of the following
 - a. Three similar successfully completed works each costing not less than the amount equal to 40% (Rs 89,18,476/-) of estimate cost. Bidder has to submit performance report of completed work.

OR

b. Two similar successfully completed works each costing not less than the amount equal to 50% (Rs 1,11,48,096/-) of estimate cost. Bidder has to submit performance report of completed work.

OR

c. One similar successfully completed works each costing not less than the amount equal to 80% (Rs 1,78,36,953/-) of estimate cost. Bidder has to submit performance report of completed work.

(f) Financial Standing (Annual Turnover):

The average annual turnover of bidder during last three audited financial years (2021-22, 2022-23 & 2023-24) should not be less than Rs 89,18,476/-(40% of estimated cost). To substantiate the Annual Turnover, Contractor needs to submit the Chartered Accountant (CA) Certificate.

NOTE:-

Turnover for the financial year 2023-24 can be considered if the accounts are audited and certified by Chartered Accountant or attach Balance Sheet for respective years as a proof of document. In any case three consecutive financial year's turnover will be considered.

(g) The Bidder should keep in consideration positive variation in BOQ permitted as per GCC and RTPPR-2013. Bidder should be able to take up additional similar work at short notice at the accepted rate for which he has to allocate his additional resources. Similarly the scope of work may also be reduced on account of actual field requirement or poor performance of the contractor and bidder shall have no right for any claims due to reduction in scope of work.

(h) Other Eligibility Requirements, if applicable:-

Bidder should meet other eligibility requirements as per following -

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S. No.	Eligibility criteria (Document To be Submitted)
i.	Copy of Articles of Association & Memorandum of Association (if applicable)

Note:-

- A. For point no. (i), in case of bidder is JV/Consortium; the above documents shall be mandatorily submitted by each of the constituent members.
- B. All uploaded documents need to be signed, else such documents shall not be considered.
- C. In case of JV, the document related to 1.3(d) & 1.3(e) shall be submitted by all the stakeholder of the JV. Further, JMRC will evaluate 1.3(d) & 1.3(e) for the specific stakeholder company not for individual stake holder to fulfil the eligibility criteria.

SECTION 2

SCOPE OF WORK

2.1 INTRODUCTION

2.1.1 General

- i. Jaipur Metro Rail Corporation Ltd. (JMRC) is a wholly owned company of Government of Rajasthan and it was formed to implement and operate the Jaipur Metro Rail Project in Jaipur city. JMRC started its operations on the East-West Corridor from Mansarovar to Chandpole from 03/06/2015, with a total length of 9.63 kms under Phase-IA with eight elevated and one underground station, at approximately one km intervals and Phase 1B, a 2.4 Km stretch from Chandpole to Bari Choupar (underground) started on 28/09/2020. Further it is planning to introduce three stations.
- Jaipur Metro has Automatic Fare collection System which includes many sub system to manage the passenger access and fare collection on the basis of Business rule.

iii. Existing AFC system (Phase 1A & 1B) Corridor consists of:-

Phase No.	Section		
Ph-1A	Mansarovar to Chandpole		
	Stations		
	Mansarovar		
	New Aatish Market		
	Vivek Vihar		
	Shyam Nagar		
	Ram Nagar Civil Line		
Railway Station			
	Sindhi Camp		
	Chandpole		
Ph-1B	Chandpole to Badi Chaupar		
	Stations		
	Chhoti Chaupar		
	Badi Chaupar		

iv. JMRC plans to upgrade its AFC system at existing 11 stations and OCC level equipment to introduce QR ticketing on paper and mobile, as per specifications of MoHUA and should have seamless interoperability to all future added new stations using AFC system for passenger movement.

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2.1.2 System Description

- i. Jaipur Metro AFC system uses recyclable contactless smart token (CST) as single journey ticket and contactless smart card (CSC-Type A) for multiple journey in existing 11 stations. JMRC is planning to discontinue usage of token as single journey ticket. Token shall be replaced by QR ticketing on mobile and paper. Further, it is planning to introduce new Technology as per specifications of MoHUA in existing 11 stations and at all new stations for future up gradation and hence the system is so designed to incorporate the same in future.
- JMRC plans to upgrade its system to issue ticket using various platforms on mobile and website.
- iii. JMRC system shall be upgradable in future for ticketing on mobile/other form factor.
- iv. The station equipment sends the data to AFC Station computer (SC) through LAN for processing. SC further uploads this data to Central computer for end-of-day processing and revenue and traffic reports.

2.2 SCOPE OF WORKS

2.2.1 The scope of the works includes:

- Design, supply, Installation, Testing and Commissioning of AFC system for upgradation of existing Stations AFC gates and Ticket Office Machine to support Contactless Smart Cards (Type A), Paper QR ticket and Mobile QR ticket.
- ii. It also includes Design, supply, installation, Testing and commissioning of TG and its integration with the current CC, online platform for mobile ticketing. The proposed solution shall work seamlessly for distributing the passenger movement and day to day data /Reports.
- iii. Station wise list of equipment available are given in **Appendix** '1'. The delivery includes all the items, which have not been included in this list but are part of proposed solution and are required for implementation at all levels: Central level, Station or Equipmentlevel.
- iv. The AFC System shall support a Fare Table of minimum 32 Stations and 16 fare zones. The TG should be scalable and integrable for JMRC future extensions and other service provider as well as number of lines / stations / equipment and smart cards by addition of extra hardware).
- v. System shall meet existing JMRC business rules and shall be designed keeping in view of future Business Rules expansion/modification requirements.

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vi. The Contractor shall follow the schedules of works as mentioned below

Work details				
Submission of Design document for QR Ticketing implementation in AFC system of JMRC				
Design Approval by JMRC				
All the system testing in SDC platform				
Installation of AFC hardware at every station at TOM/SC, one entry and one exit gate and perform the testing				
Verification of all transaction, parameters recorded in the central server				
Installation of AFC hardware at every station in complete AFC system and perform the testing				

2.2.2 Detailed Scope: -

- Upgradation/supply of existing JMRC AFC system including certified Readers for QR Ticketing to supports Contactless Smart Cards (Type A), Paper QR ticket and Mobile QR ticket.
- Supply/Upgradation of new/existing TOM/EFO to support Contactless Smart Cards (Type A), Paper QR ticket and Mobile QR ticket.
- iii. System shall meet existing JMRC business rules and shall be designed keeping in view of future Business Rules expansion/modification requirements.
- iv. Supply/Upgradation of all network accessories (if required) like Network switches, router, cables etc required to support Contactless Smart Cards (Type A), Paper QR ticket and Mobile QR ticket.
- v. Supply/Upgradation of station servers (if required), to supports Contactless Smart Cards (Type A), Paper QR ticket and Mobile QR ticket.
- vi. Supply of TG server to support Paper QR tickets and Mobile QR tickets.
- vii. TG shall also be able to handle all interfaces of Paper QR tickets and Mobile QR Ticketing
- Complete Interface with TG, Bank and Bank switches (if required).
- ix. All Hardware and software modification required in current AFC equipment (Gate, TOM/EFO, Station Computer and Central Computer) for the implementation of the QR ticketing.
- x. Complete Interface with current AFC system at all levels and standard interface shall be provided to JMRC for the integration of any future AFC provider.
- xi. Installation & Commissioning of complete system.
- xii. End to end testing of complete system with all relevant parties e.g. Bank, JMRC and other required for commercial operations.

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2.2.3 Ticket Generator (TG):-

- i. The supplied system shall include a Ticket Generator server (in redundant configuration) to implement QR ticketing functionality. TG should comply with QR ticketing specifications of MoHUA i.e. Specifications for QR Ticketing system for Transit Applications Version 1.1-reg. or latest and should meet minimum following requirements, detailed requirement shall be finalized.
- TG shall be designed to meet the requirements of QR ticketing for whole JMRC network.
- iii. TG shall be able to securely exchange the transaction data with station devices/SC/CC.
- iv. TG shall be able to encrypt and decrypt the transaction.
- v. TG shall ensure integrity of QR tickets
- vi. Server authentication shall be completed during every new connection
- vii. TG shall broadly cover the following functionality:
 - A. Issuance of QR Ticket
 - B. Validation of QR ticket

A. Issuance of QR Ticket:-

- TG should process QR ticket request in online and offline mode both. Mobile QR
 Ticket can be static or dynamic.
- ii. For offline mode, TG shall distribute QR ticket ID lots to SC/equipment or TG can process a parameter to SC/equipment for generating a unique QR. TG shall be responsible to process QR ticket for mobile app, website & /website if any.
- iii. TG shall integrate with website/Mobile app (Android and iOS).
- iv. For 3rd party website/mobile app integration, TG or web server shall manage standard API's for JMRC.
- v. After issuance of QR Tickets, the details shall be updated to TG.
- vi. It is recommended that QR ticket structure should be parameter based and securely updated at SC/equipment.
- vii. Data integrity and security of QR ticket shall be maintained and demonstrated by TG.

B. Validation of QR ticket:-

- TG shall work as administrator for QR ticket validation. However, TG should have an option to transfer its role to respective CC/SC/SLEs.
- ii. Under supervision of TG, It is recommended that initial validation should be done at SLE's level and ticket id and entry/exit time stamp shall be validated at station computer or TG. However, in degradation mode, TG should facilitate the

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- role of ticket validation at any zonal SLE's e.g. in array of gate, any gate can become master for ticket validation or any nearby EFO can become master for ticket validation.
- iii. Entry time stamp shall be updated to destination SLE's or SC or TG within 120 seconds.
- iv. Blacklisting of QR tickets should be done almost in real time.
- v. If required, dynamic mobile QR shall be updated based on time, location or Geofencing coordinates. It should be based on the MOHUA QR Specifications.
- vi. QR based system should be designed in such a way that any pre or post journey (i.e. passenger can exit before or after the exact destination mentioned in QR ticket) should be handled by AFC system without any inconvenience to passengers.
- vii. TG should manage the inventory of all the QR codes that have been issued through TOM/EFO, TIM and website/mobile applications (Android and iOS).
- viii. TG should be able to process the QR tickets in post issuance mode for TIM, TOM/EFO, TVM and other sales channels if the transactions are completed offline and network with station devices are down.
- ix. TG should perform all the validation functions as mentioned in the business rules of JMRC.
- x. TG should facilitate SLE's to allow only one access for one valid QR code ticket issued in the system unless they are issued for multiple trips.
- xi. All the QR ticket transaction should be instantly updated in the CC/Webserver/TG once these are issued from the TOM/EFO, TIM, TVM and web/mobile application.
- xii. The TG shall also provide fall-back facilities in the event of prolonged communication failure with the station level equipment/SC/CC. QR ticket related data on the TG shall be copied onto a backup media and downloaded to station level equipment/SC/CC if necessary.
- xiii. Transaction should be backed-up as per the current backup policy of JMRC.

2.2.4 General Technical Specifications

i. Automatic Fare Collection system shall, as far as possible, operate using open, non- propriety industry standards and shall be highly reliable, scalable, secure and customer friendly facility. The system security shall include, as a minimum, protection against fraud, theft, falsification of data, false accounting, external threats, denial of service, eavesdropping, loss or corruption of information, masquerading (spoofing) and unauthorized access & etc. The system shall adhere to industry recognized International and National standards and practices published and maintained by organizations such as EMVco, PCIDSS, IEC, ISO, CEN, EN, NPCI and ISI etc. as applicable.

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- ii. Contractor shall deploy system for Jaipur Metro which is able to perform day to day monitoring of the ticketing operations and shall have provision to generation MIS report as per the requirements of the Jaipur Metro.
- iii. Complete interface which are required for final AFC System which is able to supports Close Loop Card (Type A), QR Ticket (Paper QR and Mobile QR),
- iv. The scope of supply shall include all necessary hardware/ equipment, software, accessories, materials, documentation and facilities necessary to meet all requirements of the AFC system for the required stations.
- v. Issuance infrastructure- this shall comprise of setting up the issuance infrastructure at the TOM/EFO which will be used to issue JMRC Smart Card (Type A) and QR Ticket.
- vi. Fare media Acceptance Infrastructure This shall comprise of contactless readers to read, process ticketing media (Existing JMRC Smart Card (Type A) & QR Code). This infrastructure shall be made available at the Automatic Gates and TOM/EFO.
- vii. Local Area Network (LAN) This shall comprise of current JMRC's network of the systems including but not limited to ticked vending machine, automated gates, ticket office machines, TR cum AVM, workstations and all network equipment's necessary for operations. The WAN connectivity shall be provided by Jaipur Metro i.e. stations to stations fibre connectivity.
- viii. **Station computer** Station computer shall be the station level AFC management application responsible for monitoring station level equipment generating station level.
- ix. Complete station level networking works and network equipment like switches, routers, Firewall etc. including Ethernet / OFC cable ties conduits legends terminations other accessories power supply distribution panels power/ control cable and all fixing and termination accessories (if required).
- x. Scope of software supply shall as a minimum but not restricted to include all software required for the AFC system including.
 - a). Development / Customization of AFC application software.
 - b). Application programming interface (API) software.
- xi. Contractor shall supply to JMRC all software solution relevant to all of the AFC equipment for staff to carry out successful ticketing operations.
- xii. The operation features of the system shall be fully parameterized to provide flexibility for modification of operational parameters/ conditions. There should be provision to transfer EOD parameter (business rule as well other parameter required for running the system) to one station / few stations / all stations from current central AFC Back-office system. An acknowledgement from the equipment should be sent to central AFC Back office system automatically for the acceptance and validation of new EOD parameters (Business rule as well other parameter required for running the system)
- xiii. Power & Control Cable: To be of suitable specification. Contractor to propose as per requirement. Cables shall be ISI mark or similar international rating. Fire



retardant, Low smoke, low halogen for elevated stations and for underground stations as Zero halogen. The halogen content shall not be more than 0.5% for underground cables. Cables shall comply with latest version of British, IEC, ASTM, ITU standard. Proven in Underground Environment, for underground stations.

xiv. Data Cable: All data cable to be utilized in underground stations to be low smoke zero Halogen (<0.5% Halogen)'.

2.2.5 General Requirements

- i. The system shall be designed to attain the Employers requirements as required in this Specification.
- AFC System shall be designed to process Contactless Smart Cards (Type A),
 Paper QR ticket and Mobile QR ticket
- System shall have provision to enable or disable any media type based on system parameter's data.
- iv. JMRC seeks an Open Architecture Solution for the AFC system with following elements:
 - a). Adherence to International and National standards and practices for the industry. (Published and maintained by organizations such as ISO, CEN, ISI, BIS etc) as applicable
 - b). Adherence to MoHUA specifications for QR ticket for inter-operability of tickets

The proposed solution (hardware and software) will ensure:

- Vendor independent delivery of modules / equipment as far as possible. Use of Standard Commercial off The Shelf products and software, encouraging use of non-proprietary items.
- Proven hardware platform. Contractor shall highlight above aspects in his technical offer.
- v. The system needs to be flexible and configurable designed to allow future adaptation in a multi-operator environment and government policies.
- vi. The attainment of the reliability, availability, maintainability and safety requirements of the system will be verified by analysis, testing and system demonstrations as required in the Specifications.

2.2.6 System and Equipment's

- The scope of supply shall include all necessary hardware / equipment, software, accessories, materials, documentation, certifications and facilities necessary for upgradation of existing AFC system for revenue operations
- ii. Requisites for interfacing, proposed AFC system with Bank for mobile ticketing and TG.

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- All the equipment's shall communicate through Standard API to Station computer and Central System. Interface of Standard API shall be provided to JMRC.
- iv. All equipment / items associated along with any interfaces required to ensure operation within the performance requirements.
- v. Maintenance tools and test equipment
- vi. Software test platform and development system.
- vii. All equipment and paraphernalia necessary to carry out factory and on site testing and commissioning.
- viii. Spare parts will be managed by contractor during DLP period.
 - ix. All software and hardware required for AFC including development system, licenses of all applications and Operating System software, API, simulator, Licensed reporting tool etc.
 - x. The software supplied for Station Computer, Gate, TOM/EFO etc shall be redeployable by JMRC for its own use for later expansions with no additional license or cost requirement.
- xi. The contractor shall transfer to JMRC all requirements specifications, design documents, interface specifications and the equipment's (including SC & CC) source codes with the exception of codes for Commercially Off the Shelf (COTS) software packages belonging to parties other than the Contractor. JMRC shall have right to re- use, re-deploy and modify the source codes.
- xii. Contractor shall provide detailed interface specifications for following interfaces (but not limited to):
 - a) QR Ticket to QR Reader/Writer to respective equipment.
 - b) Equipment to SC**
 - c) Equipment/SC/CC to TG**
 - d) Various external interfaces (Mobile Application, Website etc)*
 [*Note: It is recommended to use standard specifications issued by MoHUA or anyother concerned authority]

[**Note: For interface between equipment to SC, SC-CC and equipment to CC standard API shall be used]

- xiii. Contractor shall interface with other designated contractors for completion of scope of work.
- xiv. It is anticipated that the Contractor shall have previous experience of implementation of the QR Mechanism and Reader for Type A. In case, the Contractor shall be implementing any of the media for the first time in transit environment, it shall have to be ensured that the respective mechanism and the Reader are put to at least 1 months trials at site, first at the SDC (Software Development Centre) and then in the actual field equipment at the Stations.

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2.2.7 Services

The Services to be performed by the Contractor shall include, but not limited to the following:

- i. Design, Installation, interfacing, testing and commissioning of the AFC System
- ii. Upgradation of Station Level Equipment (Gate, TOM/EFO etc) to support Contactless Smart Cards (Type A), Paper QR ticket and Mobile QR ticket.
- iii. Presentations, meetings, reviews and audit support as specified in the Specification.
- iv. Project management of the implementation of the system.
- v. Quality management, provision of reliability and maintainability demonstration test.
- vi. Overall site supervision and management.
- vii. Decommissioning, removal and disposal of Temporary Works, if any.
- viii. DLP Period: Operation and maintenance support services during DLP period of 02 years. Efficient management of contractor's spares during DLP
- ix. CAMC If Jaipur Metro want the CAMC support for future then contractor to provide Maintenance that includes Hardware & Software Maintenance & Support services for 5 years post DLP of equipment/Parts, Supplied by the Contractor. Efficient management of contractor's spares during CAMC Period.
- Contractor shall ensure system security from fraud possibilities, falsification of data, etc. during contract period.
- xi. Preparation and submission of documentation (hard / soft copy).
- xii. Interface management.
- xiii. Training and Transfer of Knowledge.

2.2.8 OPERATIONAL REQUIREMENTS:-

2.2.8.1 General

- This describes basic operational requirements, which will govern the AFC system.
- When implementing the operational requirements, the contractor shall ensure that allassociated security/ frauds problems are addressed.
- iii. The AFC system for JMRC will be a system which requires checking of tickets at entry and exit gates.

2.2.8.2 Tickets

i. All CSCs issued from JMRC should be acceptable in the system supplied by contractor. It means the passenger can use same ticket to enter JMRC system from any station and exit from any station and vice versa.

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- ii. Mobile QR and Paper QR ticket issued for single journey should be acceptable in the system supplied by contractor. It means the passenger can use same ticket to enter JMRC system from the station for which the ticket is issued as per the JMRC business rule. The QR ticket should be interoperable in nature as per the "Specifications for QR Ticketing System for transit application version 1.1 or latest" guidelines issued by MoHUA.
 - iii. Data on the tickets shall include all the operational and business parameters as in currently issued tickets in JMRC AFC system. The JMRC ticket layout (Type A Smart card) shall be as per existing. Ticket layout for QR would be as per MoHUA and any other concerned authority.
- iv. Types of Fare Media AFC system shall use following type of fare Media-
 - Single Journey
 - i) Paper QR Ticketing
 - ii) Mobile QR Ticketing
 - Multiple Journey
 - i) CSC Type A: EV1 ISO/IEC 14443and ISO 18092 or equivalent
 - ii) Mobile QR Ticketing (As per fare product)

2.2.8.3 Types of Fare Product

The system shall accept all the fare products as defined in / Business Rules.

Description of Fare Products

- Single Journey Ticket, Paid exit and Free exit
 - a). Single Journey Ticket (SJT) shall be issued using Paper QR, Mobile QR.
 - b). SJT should be validated on Entry and Exit gate.
 - c). QR tickets shall be issued as per JMRC TG. QR ticket generation mechanism and architecture shall be broadly based on guidelines issued by MoHUA. It should be possible to issue QR tickets for other operators/events through TOM/EFO. API for same shall be provided by contractor.
 - d). Should ensure transaction integrity (anti tearing).
 - e). **Paid Exit:** QR Ticket shall be used for Paid exit if a passenger found without ticket in paid area of station or any other penalties/charges.
 - f). Free Exit: QR Ticket shall be used to issue Free exit ticket according to the business rules of JMRC.

g). Group Ticket (GT)

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- I. Ticket issued from TOM / EFO. To be used for booking a large group on a singleticket.
- II. This group ticket shall be processed at AFC Gates/ swing barrier or HHD.
- III. Amount and traffic generated by group tickets shall be accounted in the AFCreports/End of shift report automatically.

ii. Multiple journey products

1) Stored Value product (SV) - Same as implemented currently

- a). There shall be provision of SV ticket types as defined in /Business rules. Each SV type shall be allocated a set of fares and shall be capable of change by means of downloadable parameters from existing CC.
- b). The value of a journey shall be subtracted from the value stored in the SV ticket during processing at the exit gate. The passenger information display in each gate shall indicate the remaining value of the SVs tickets at the start and the completion of each journey.
- c). SVs shall have an expiry date (after last top-up) determined by an JMRC ticket sales parameter at / CC.
- d). SV products can be issued using JMRC CSC (Type A), QR Ticket.
- e). System also have a provision of maximum value of a journey shall be subtracted from the value stored in the SV ticket during processing at the entry gate. Value of a journey shall be subtracted from the value stored in the SV ticket during processing at the entry gate and difference of fare will be added to store value purse. The passenger information display in each gate shall indicate the remaining value of the SVs tickets at the start and the completion of each journey

2) Tourist Ticket/Trip Pass - Same as implemented currently

Tourist tickets/Trip Pass shall be based on no. of journeys or duration as defined in JMRC business and operation parameter. The system shall have provision for JMRC CSC (Type A) and QR ticket to be used as tourist ticket/Trip pass.

- a). Reloading of Tourist tickets will be as per JMRC business rule.
- b). Penalty/surcharge in case of mismatch at entry/exit and excess time will be as per JMRC Business rule and configurable by parameter. However, it must be assured that one tourist ticket is valid for one person at one time.
- c). Deposit amount in Tourist Ticket will be as per JMRC business rules and configurable by parameter from / CC.

3) Staff / Employee Pass (EP) - Same as implemented currently

- a). This pass shall be valid for an unlimited number of journeys on any operational day. The pass shall be good for use in any manner of entry or exit and the entry/exit code shall not be checked for correct sequence. The EP shall also not be subject to the Time-in-System check as required.
- b). System shall however keep all records of such usage for scrutiny, if required.

4) Test Ticket - Same as implemented currently

This ticket shall be used to test the functionality of all AFC equipment for maintenance purposes only. Test tickets shall be issued only when the equipment is in maintenance mode and should not work during the normal mode (Revenue operation).

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2.2.8.4 Issuance of Fare Media

AFC system shall process following types of fare media:

S. No.	Fare Media	Fare product	Issuing Equipment
1	CSC Type A	Stored Value Tourist Ticket/Trip pass Employee Pass	TOM/EFO
2	QR Ticket (Paper & Mobile QR)	Single Journey ticket Multiple Journey Ticket Group Ticket Trip Pass	TOM/EFO Website/Mobile App

2.2.8.5 Blacklisted tickets

- Ticket Blacklisting shall be done at CC. These tickets IDs shall be downloaded to the AFC equipment at stations from CC as blacklist parameter.
- Blacklisted tickets shall be rejected / blocked by AFC gates when Card is shown for Entry, AVM when the Card is presented for doing Add Value.
- iii. TOMs shall not accept blacklisted tickets for add value functions and display the reason to inform the operator. Every detection of blacklisted tickets shall be recorded at the SC / CC
- iv. Blocked ticket can be unblocked at TOM/EFO by paying the surcharge in cash.
- v. Size of Blacklist downloaded to devices to be finalized at design stage to match with CC, however not less than 500000 of each fare media in any case.
- vi. Blacklisted QR ticket shall be downloaded to the AFC equipment at stations within 5 min from TG.

2.2.8.6 Special Modes

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It shall be possible to operate the system in following special modes through SC, Current CC and gate:

1. Time mode override Time check in system is bypassed

2. Entry / Exit override Entry/exit check in system bypassed

3. Station Close Entry gates are closed4. Emergency Mode All gates become open

5. Incident Mode No amount deducted from SV Smart Cards. No

entry/exit bit is marked. For single journey tickets, all checks are bypassed at gate and tickets are accepted. Partially used single journey tickets can be refunded

from EFO (paid side)

6. High Security Mode Any Ticket can be put in High Security list. When this

Ticket is displayed at gate, some indication must

appear likebuzzer/light flash.

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2.2.8.7 **Configuration Parameters**

- i. The Contractor shall provide a document having the list of all configuration parameters.
- For QR ticket, contractor shall provide interface with TG for parameter or other ii. data update/exchange
- iii. The operating features of the system shall be fully parameterized to provide flexibility for modification of operational parameters / conditions at CC. An acknowledgement from the equipment should be sent for the acceptance and validation of new EOD parameters. Parameter shall be incorporated at CC level and distributable to the equipment. Same will be finalize during design phase
- Parameters/ Certificates/ Keys etc. shall be downloaded at equipment from iv. current CC to be effective at a future date or time. Information from the equipment should be sent for the acceptance and validation of new Parameters/ Certificates/ Keys etc. same will be finalize during design phase.
- Parameters/ Certificates/ Keys etc. shall be downloaded to the equipment to be V. effective at a future date or time. An acknowledgement from the equipment should be sent for the acceptance and validation of new Parameters/ Certificates/ Keys etc.
- Ticket IDs for QR code shall be transferred to equipment/SC/CC vi.
- System will accept global EOD parameters from CC and implement at station level vii. to ensure smooth operation as regards system performance, design functionality, passenger traffic etc.
- viii. The Contractor shall obtain the latest Business rules / fare policy from the Employer's engineer during design phase.
- ix. During the download the device shall be able to operate normally and the time elapse to switch to new operational parameters shall not affect the normal operation.
- Parameters can be downloaded at all equipment from OCC at the End Of the day x. or during operation time without affecting the normal operation of equipment. However, the distribution of equipment shall be controlled at CC level to be done automatically or manually and also to be done Equipment wise, station wise or at all equipment/stations at once.
- The station equipment shall maintain at least two versions of configuration xi. parameters. It shall be possible to switch back to previous version of EOD.

xii. Fares

- a) Fares shall be both station-to-station based and zonal system basis with provision for direction based issuance for each type of ticket.
- b) System shall have provision of up to 16 fare zones and 32 stations (configurable). Each ticket type shall have its own downloadable fare tables. For a fare table change, it shall be possible to download the new fare table from the CC ahead of the implementation date. The fare shall be as per JMRC fare parameter at CC and derived from: -ON RECTOR JAPUR

- i. Assigned fare for the particular journey. ii). Fare Products
- ii. Time period Peak and Off-Peak periods
- iii. Peak Direction/off peak direction
- iv. Days of the week shall be classified into 4-day types, namely:
 - Weekdays
 - Saturdays
 - · Sundays and
 - Special days / Public Holidays
- v). System shall have provision to maintain calendar for over one year.

xiii. Operating day

For revenue reconciliation, a distinction shall be made between the consecutive operating days. System shall support overnight operation. To avoid inconvenience to passengers who enter the system before midnight and exit the following day after midnight, the tickets issued on previous day (before midnight) shall be usable up to 05:00 Hrs. next day.

2.2.8.8 Business Rules

The fare media is processed as per Business Rules defined by JMRC in the application software at the equipment. Existing JMRC Business Rules will be share after LOA award. Such rules are subject to change as per future operational requirements of JMRC and CC interface requirements, other governing agency.

2.2.9 AFC station Equipment's

2.2.9.1 Ticket Office Machine(TOM)/Excess Fare Office(EFO)

- Each TOM / EFO may be considered as a Point of Sale of tickets and for handling passenger's enquiries. The TOM shall be installed in the booking office and EFO at Customer Care Centre at stations.
- ii. TOM/EFO shall support fare media specified in Bid clause 2.2.8.4

iii. Modules

The current TOM/EFO will be upgraded with following functionalities:

- Contactless reader/writer that supports Contactless Smart Card Type A (if required).
- QR code scanner with stand that supports Paper QR and Mobile QR.
- Supply of printer as per latest MoHUA guideline.
- Software and accessories.

iv. Functions

This machine will be operated by the staff and will process following operations:

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- Ticket issuance / sale, Add-value on CSC Type A, Refund, Replacement, Surcharge, Cancellation, Ticket consultation / Analysis etc. as per JMRC Business rules.
- 2) For Single Journey ticket sales operation, there shall be provision for two methods for ticket issuance:
 - a) First option for 'station list' based selection for ticket issuance with stations, Line wise arranged in a list. By clicking at any station icon, ticket to that station can be issued.
 - b) Second option for 'zone wise selection MMI' (downloadable from CC). TOM/EFO at each station shall have its own unique fare table in relationship with its station of origin.
- 3) Accountal of quantity / cash collected for adjustments and surcharge handling such as entry /exit bit mismatch, excess fare processing, excess time limit etc. as per business rules.
- Accountal of media stock Detailed information shall be displayed in shift end receipt. Current stock information shall be available at SC.
- 5) Running maintenance tests for all attached modules.
- 6) User / Operator friendly GUI for sales and other operations: It should display, networkcommunication status, R/W status, Station mode of operation, media quantity etc.
- 7) There shall be an Auto top up interface at TOM/EFO to directly interface with CC for bank Top up related functionality.
- 8) There should be provision to run audio files so that ticket issuance/add value information can be played.
- 9) Commuters shall be able to pay by:
 - i) Cash
 - ii) Debit, Credit cards (Contact & Contactless both) using the non integrated POS machine

v. Security

- 1) Secure transactions and data transfer.
- Mechanism (such as audit registers) for audit of all transactions (for all quantities and revenue figures).
- 3) SAM for Reader/writers to be issued from CC. Supply of SAM if required is in the scope of contractor.
- 4) No chances of any fraud transactions by fast swiping of tickets over reader/writer or any other means. Data should be recorded first in system and then in media or provide any other way to take care of fraud due to fast swapping of card.
- 5) Both options for Password protected and CSC based log-in for Operator agent, Supervisor agent and Maintenance agent.
- 6) TOM/EFO shall comply with the PCI and other regulatory guidelines.

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vi. Communication with SC/CC/Bank/TG

- 1) Accept all operational parameters / software from SC/CC.
- 2) It shall receive QR ticket IDs and validate QR ticket from SC/CC/TG. QR validation mechanism shall be finalized during design stage.
- 3) The TOM shall communicate with CC for authorization of certain transactions such as refund / replacement of CSC, etc.
- 4) TOM/EFO shall communicate with SC for validation of transaction. It shall be a configurable parameter.

vii. Data Storage and Integrity

- TOM shall store all records for minimum one month in case of communication failure.
- 2) The transaction records, audit records, and status records will be stored at TOM and sent to the Station Computer after the Communication link is restored.
- 3) All usage data such as transactions, audit registers, events, warnings, alarms etc to be sent to SC.
- 4) Provision for degraded mode data transfer shall be provided (in case of network failure).

viii. Passenger Information Display

- 1) English and Hindi characters, Pictograms, alphanumeric and symbols
- Display shall have provision to display in all regional language for QR code based ticketing.
- Display ticket amount, date/time, current transactions messages, error codes and corresponding messages
- 4) Displayed information visible from all angles in broad day light also.
- 5) Displayed information shall be easily configurable locally.
- 6) The amount shall be announced through speaker and displayed on PID.
- 7) There should have a provision of audio so that during vending of ticket/ add value on card, a message can be played for passenger convenience.

ix. TOM Performance to be achieved

1) Throughput 10 passenger transactions per minute.

MCBF 10,000
 MCBJ 20,000

4) MTTR 30 minutes

5) There should not be frequent system hang faults during operation.

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x. Safety

No chances of electric shock to user in any case. No sharp edges.

2.2.9.2 Automatic Gate

- i. Automatic Gate's hardware and software shall be upgraded/replaced/modified to enable the use of CSC Type A, QR Ticket & QR Mobile Ticketing.
- ii. Contactless Smart Token (CST) acceptance/capture mechanism shall be removed from all the Automatic Gate (Paper and Mobile).
- iii. Single target solution for CSC Type A and QR should be proposed by the bidder.
- iv. Any of the existing functionality and performance of Automatic Gate should not be degraded on upgradation.
- v. Design, Develop & Upgrade Kernel & Firmware of Gate Reader's for acceptance of all CSC Type A, QR Ticket (Paper and Mobile).
- vi. At entry and exit QR readers shall be integrated with Automatic Gate for QR tickets (Paper QR and Mobile QR).
- vii. It is recommended that positioning of the readers and QR scanner has to be designed in such a way to ensure passengers has to present all types of fare media at a common place while passing through Gate.
- viii. Hardware and software should be upgraded to meet the requirement as detailed above.

2.2.9.3 TR cum Add Value Machine (AVM)

- Enhancement/modification/replacement of existing AVM's hardware & software to supportfollowing functionalities:
 - · Analysis of following fare media's:
 - Contactless Smart Card (Type A)
- All the financial transactions shall be updated on back office through any standard API and events/alarms shall be updated on SC
- iii. Any of the existing functionality and performance of AVM should not be degraded upon this enhancement/modification/replacement.

2.2.9.4 Equipment management

- Contractor shall follow secure equipment management of all devices including new equipment registration, equipment removal or deletion and blacklist as per CC/SC requirement.
- ii. The CC shall manage and initialize all equipment and associated SAMs for the metro equipments. The CC shall further distribute and manage the SAM for the equipment.
- iii. The equipment's will be physically managed by the CC whereas the information for all CC's equipment. Each equipment will be uniquely identified by equipment ID. Each equipment owner will be allocated a series of IDs from which they will allocate IDs to new equipment.

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iv. Identification and blacklisting of fraudulent, stolen / lost equipment's and updated information shall be sent to CC. Blacklist entry for lost /stolen equipment shall be done at CC and distributed as global blacklist parameters.

2.2.9.5 Security Management

Security requirements: - Security shall cover following aspects applicable to AFC system:

- i. Physical protection of equipment
- ii. Security of data and transactions
- iii. System security
- iv. Protection of revenue
- v. Security of cash through audit trails
- vi. Blank SAM if required shall be provided by contractor and same will be activated by CC for equipment.

2.2.9.6 Key Management:-

Key management shall be done at CC. The DSM and/or SAM (having Security keys) of all the equipment's shall be issued from CC. Blank SAM as per requirement if required shall be provided by Contractor to Back Office. K

2.2.9.7 EOD and Configuration Management:

- 1) EOD will be as per CC Interface Requirements.
- 2) EOD parameters shall be common in all the systems.
- 3) In addition, CC shall send other local EOD parameters to equipment as required.

2.2.9.8 Software / Document version Management.

There shall be a provision to see the Software version status of equipment's at CC with exception reports.

2.2.9.9 Alarms, Events & Warnings

Alarm signals shall be transmitted automatically for display on the Back Office. All-importantalarms shall have to be acknowledged.

2.2.9.10 NETWORK AND CABLING

2.2.10.1 Network Management

- 1) Contractor shall be responsible to ensure that CC/TG will be connected with the station AFC LAN through WAN link provided by the telecom contractor with assurance of required data flow without any restriction.
- 2) Contractor shall evaluate the networking requirement of existing 11 stations and central (CC /TG) level for QR ticket, QR Mobile and existing smart card Network architecture shall be evaluated for the online payments modes prevailing in Indian market like UPI. Accordingly, contractor shall supply and install the networking equipment like switch, routers, firewalls etc. It includes the supply

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and installation of racks, power supply, LAN cables and any other items necessitated as part of upgradation work.

- 3) All the connectivity between CC, TG, Stations along with any other requirement specified in this Bid is part of this contract.
- 4) Supply of networking equipment and accessories along with other requirements at CC TG/Stations shall adhere to specifications as provided.
- 5) Network shall be failsafe with redundancy. Further, it shall fully cater to peak traffic load in JMRC.

2.2.10.2 Cabling - Data, Power and Control Cables

Contractor shall evaluate the requirement of LAN cables and power cable for upgradation work at station level and central level. It is desirable to replace the LAN cable connectivity of all the active components including connectivity of central server with respective active components.

Specifications for cabling shall adhere to below specification as minimum:-

Cable Specification

1. Data Cable -

The cable shall as a minimum comply to the following:

- i). The cable shall be UTP Category 6 cable.
- ii). Characteristic Impedance: 100 +/- 15 Ohms.
- iii). Coupling attenuation @ 30 MHz: 45 Db/100miv).

Conductor diameter: 0.50 mm minimum.

- v). ACR at 100 MHz: 16 Db/100m.(minimum)
- B. Test results and certificates shall be submitted Representative or review of Employer

2. Optical Fibre Cable -

Fibre Optic cables shall be in accordance with the latest industry standards such as ITU-T: G.652 or G.655 for single mode fibre and ITU-T: G.651.1 for multimode fibre.

3. Power & Control Cable -

To be of suitable specification. Contractor to propose as per requirement.

- i). Cables shall be ISI mark or similar international rating.
- ii). Fire retardant, Low smoke, low halogen. The halogen content shall not be more than 0.5% for cables used in underground and not more than 20% for cables used at elevated / at grade stations.
- iii). Cables shall comply with latest version of British, IEC, ASTM, ITU standard.
- iv). All cables should have continuous operating life of at least 25 years.

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2.2.10 DESIGN REQUIREMENTS

2.2.12.1 Software Requirements

- The Contractor shall demonstrate to the Employer the correct application of the standards.
- ii. The Contractor shall submit with the Design Plan for the review of the Employer a list identifying all software, which will be maintainable and re-configurable by the Employer.

2.2.12.2 System Life Cycle Performance Requirement

- i. The Contractor shall ensure that all equipment and material used is able to meet the specified availability throughout its service life as required to minimize disruption to the railway operation and to minimize the ongoing maintenance costs.
- ii. The Systems shall be so designed as to have a minimum of 10 years of service life (except Computer Hardware/Displays wherein it will be 7 years) operating continuously. The life of all the cables shall not be less than 25 years.

2.2.12.3 Security Provisions

The equipment shall be designed with features, which deter revenue losses from the following:

- i. Acts such as altering, copying or counterfeiting the tickets.
- ii. Protection from unauthorized changes to the software.
- iii. Protection from falsification of records. Provision shall be made to allow entry at the internal keypad of pre-encoded ticket serial numbers to track the ticket supply in order to identify any variances between the tickets dispensed and the tickets used in re-supplying TOM and the exit gates.

2.2.12.4 Stand-Alone Operation

Individual units of the AFC equipment shall be capable to function in a standalone mode. Any breakdown in cabling or communication links between units of equipment or computer installation in stations/CC/acquiring bank/TG shall not affect operation.

2.2.12.5 Modular Design

Modules, subsystems, assemblies and components shall be of modular design for ease of maintenance. The mean time to replace shall be less than 30 minutes.

2.2.12.6 Maintainability

All components shall be packaged in replaceable and repairable modules. The mean time to replace line replaceable unit shall be less than **30** minutes. Standard hardware and components shall be used for flexibility and ease of maintenance.

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2.2.12.7 Weight Limitation

Modules requiring removal for off-site maintenance shall be limited to 25 kg. Modules weighing more than 10 kg and requiring on-site maintenance within the equipment structure shall be provided with hinges or roll-out slides.

2.2.12.8 Maintenance

Employer's maintenance philosophy is to fully maintain the AFC equipment with its own staff or by a nominated agency. The job of the AFC Field Technicians is to perform preventive maintenance on the equipment and to isolate failures in the field only to the extent to enable identification of a failed replaceable unit. The failed unit will be replaced and the unit will be sent to Employer's maintenance facility for further failure analysis to determine the specific cause of failure and appropriate action.

VERIFICATION, TESTING AND COMMISSIONING 2.2.11

2.2.12.1 General Requirements

1) General

- This section of the Specifications covers the requirements for tests to be performed by the Contractor on AFC equipment, special tools, materials and accessories furnished under this Contract. Factory tests shall be performed prior to shipment and field tests shall be performed after shipment. A series of inspections and tests shall be conducted on the pre-production units and production units of equipment in order to:
 - Demonstrate compliance with the Specifications from a physical, operating servicing, and reliability standpoint.
 - Confirm satisfactory operation prior to delivery, after installation, and prior torevenue service.
 - Evaluate efficiency of the equipment in the performance of transactions.
 - Identify potential problem areas.
- The Contractor shall perform testing and commissioning activities by stages in accordance with the requirements given in this Specification.
- The Contractor shall ensure the system is in a state ready for testing and C) commissioning before the commencement of the tests witnessed by the Employer. The Contractor may conduct trial tests by himself before the Employer witnesses thetests, if necessary.
- Test results of the Contractor's own trial tests shall be made available to the d) Employer on request before the tests are witnessed by the Employer, to indicate thereadiness of the system for tests witnessed by the Employer to commence.
- The Contractor shall satisfy himself that all items interfacing to Designated Contractors are in satisfactory condition for the Contractor's tests to be carried out.
- The Contractor shall provide all necessary test instruments, special tools, n DIRECTOR JAIPUR Page 30 of 103 emulators, simulators and test software to carry out the

- g) The Contractor shall provide simulation for testing in case the interfacing equipment is not available for testing.
- h) The Contractor shall extend full support to the Employer and provide all necessary facilities to enable convenient inspection of materials, work and testing.
- i) The Contractor shall investigate and provide corrective actions for all the faults detected during the tests. The tests shall be resumed only after all the faults are properly cleared. The Contractor shall submit fault report to the Employer to describe the symptom and causes of the faults and the corrective actions taken.
- j) If the operation of other Designated Contractor's system or equipment is suspected to be interfered by the system during the test, the Contractor shall with held the test, investigate and provide corrective actions, if necessary. The test shall be resumed only after the interference has been eliminated or found to be not related to the system.
- k) The Contractor shall prepare check-off sheets to list all items to be inspected, demonstrations to be presented, and measurements to be made for each piece of equipment. Examples of such items include but not be limited to the following:
 - Fabrication workmanship and quality.
 - Wire and cabling installation, attachments, tags, and connections.
 - Existence of all required features such as a door stop, maintenance telephonejack, bar codes, model and serial numbers.
 - · Weight checks.
 - Leakage current measurement.
 - Existence of safety precautions.
 - Primary power and RAM back-up power.
 - Memory storage space capacity.
 - Durability and stress tests.
 - Confirm waterproof and electrically isolated keyboard.
 - Check immunity against water accidentally entered into machine from seepage, splashing or wet tickets and intentional insertion of liquids.
 - EMI interference.

2) Test Plan

The Contractor shall submit a Test Plan for the Employer's approval. The approved plan shall be used as a controlling document for all inspections and tests. The Test Plan shall include, but not be limited to the following information for each test:

- · Test title.
- · Reference to specification section requiring the test.
- · Organization performing the test (Contractor, Subcontractor, independent test
- Test location(s).
- Schedule showing dates for submittals of test procedure, test report, and/or

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certifiedtest document.

- · Test start date.
- · Test duration.
- · Test objectives.
- · Test pre-requisites.
- · Problem recording, tracking and resolution reporting format.

3) Test Procedure

The Contractor shall develop detailed 'Test Procedure' for each test to be performed. Test procedures shall be prepared by equipment type or assembly. The test procedures shall be submitted for approval by the Employer. The test procedures shall include butnot be limited to the following:

- · Test title.
- · Equipment and instrumentation with accuracies and calibration data.
- · Test methodology.
- · Personnel and equipment requirements.
- · Step-by-step procedure to perform the test.
- · Test input and expected output.
- Forms to record data, with fields for date, name and signature of persons conductingor witnessing the test.
- · Test procedure revision number and date.
- Forms for entering problem descriptions and unique tracking identifier. In the case
 of problems related to software, problem descriptions shall be entered also into the
 configuration control software.

4) Revision

Based upon the results of the first items tested, the Contractor may initiate 'Revisions' to the test procedures. The modified test procedures shall be resubmitted to the Employer for review and shall meet the same submittal requirements indicated. If the procedures are revised, the complete test shall be re-conducted.

5) Test Reports

Within 30 calendar days after completion of each test, the Contractor shall submit three copies of each test report to the Employer for approval. Also, the Contractor shall submit all the test report (Installation testing, PAT, SAT, Testing & Completion etc.) in HTML form with field validator.

Each report shall document the results obtained and shall include but not be limited to the following:

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- · Title of test.
- · Reference to the Test Procedure number and revision number.

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- Location and date of test.
- Test Equipment used, including serial numbers and copies of calibration certificates.
- · Printed names and signatures of individuals who performed the test.
- Printed names and signatures of individuals who reviewed the test and tests results.
- Printed names and signatures of individuals who witnessed the tests on behalf of the Employer, if any.
- Results including tables, curves, photographs and any additional test data required to support the test results.
- Descriptions of any failures and modifications including reasons for such failures and modifications and names of individuals approving such modifications.

6) Witnesses

The Employer shall have the right to witness all tests including factory tests conducted by the Contractor, its contractors, or by independent laboratories. The Contractor shall confirm the date of any scheduled test at least 10 days prior to the test.

7) Test Responsibility

- a) The Contractor shall be responsible for all tests performed under the Contract including Reliability Demonstration Test (RDT), Revenue Readiness Test and Maintainability Demonstration Test (MDT).
- b) The Contractor shall furnish all test instruments and other equipment and materials necessary for performing all tests required.
- c) Should there be any loss of AFC equipment or damage to such equipment as a result of tests, the Contractor shall be fully responsible for replacing the damaged equipment and/or repairing such equipment. Replacement of damaged equipment shall include all costs, including but not limited to, removing damaged equipment, and furnishing, transporting, installing and testing replacement equipment.

8) Rejection and Retesting

- a) Failure of equipment to meet test specifications or ratings shall be sufficient ground for rejection of equipment. Equipment failing to pass the test criteria shall have deficiencies corrected and be retested. If the modifications or changes affect any drawings, diagrams, or other documents submitted to and accepted by the Employer, such drawings or diagrams shall be revised and re-submitted for the Employer's approval showing the proposed changes before changes or modifications are made on the equipment.
- b) Modifications or changes, which do not warrant revisions of any drawing, shall still be furnished to the Employer with notice of the retest schedule. If it is not possible to rework rejected equipment, replacement equipment shall be provided. The requirement for drawings and design calculations of the original unit shall be applicable to the replacement unit. The entire cost of the rework or the replacement unit shall be borne by the Contractor, including retesting and the

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costs incurred by the Employer to witness the retesting.

9) Ambient Conditions

Unless otherwise indicated measurements and tests shall be made at the ambient temperature and humidity conditions that exist within the test area and are typical of the stations in which the equipment will be installed. Whenever conditions must be controlled in order to obtain reproducible results, a fixed set of conditions shall be used of approximately: 45 °C degrees, and 90 percent humidity. Ambient conditions shall be recorded periodically during the test. The Contractor shall be responsible to monitor and control the environmental conditions required.

10) Demonstration Tests

The demonstration tests shall be conducted on pre-production units of fare collection equipment. The Contractor shall fully demonstrate the functions and operations of each type of AFC equipment.

11) PERFORMANCE MONITORING PROGRAMS

11.1 General

This chapter of the Specifications covers the requirements of performance, reliability and maintainability to ensure long-term performance of the AFC equipment furnished under this Contract. Performance monitoring is also included in order to obtain acceptance and confidence in the calculated levels of performance. The Contractor shall submit evidence collected from factory tests and from field tests on the pre-production equipment and on the production equipment.

INTERFACE TEST.

- 1) This includes-
 - · Interface test with CC
 - Interface test with existing JMRC AFC System
 - · Interface test with Bank/TG
- 2) Any simulator requirements for testing shall be provided by the contractor.

11.2 Testing Stages

The Contractor shall carry out testing and commissioning activities in the following phases:

· On Site Testing and Commissioning.

11.2.1 On-Site Testing and Commissioning

General

The on-site testing and commissioning shall be undertaken in the following phases:

- a. Installation Tests;
- b. Partial Acceptance Tests;
- c. System Acceptance Tests; and

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d. Tests on Completion.

The Contractor shall prepare and submit to the Employer for review an On-Site Testing and Commissioning Plan.

11.2.2 INSTALLATION TESTS

- 11.2.2.1 Installation Tests shall be carried out on individual Subsystem location by location after the completion of equipment physical installation.
- 11.2.2.2 The objective of the installation tests shall ensure:
 - The equipment is installed in accordance with the reviewed design documentation;
 - ii) The equipment is installed in accordance with the requirements detailed in this Specification;
 - iii) All cables are properly and accurately connected and terminated; and
 - iv) All installation works are of acceptable workmanship.
 - v) The Contractor shall develop procedures for Installation Tests and submit to the Employer for review.
 - vi) The Installation Test shall not be started unless the Employer has reviewed the test procedures without objection.
 - vii) All installed equipment shall be physically inspected against all relevant review design documentation.
 - viii) All the installation test results, physical locations of the equipment and serial numbers shall be captured in the test record forms. The Contractor shall include completed test record forms in the Test Report and submit to the Employer for review.

11.2.3 PARTIAL ACCEPTANCE TESTS

- 11.2.3.1 Partial Acceptance Tests shall be carried out on individual Subsystem location by location, on areas or section basis to verify the functions, performance and services coverage at the stage:
 - i) After successful completion of the Installation Tests;
 - ii) After the Subsystems have been configured with correct settings and parameters;
 - iii) Properly connected to the power supply and can be switched on for Partial Acceptance Tests; and
 - iv) Before the equipment of different locations are connected up and ready for System Acceptance Tests.
- 11.2.3.2 The Contractor shall develop Partial Acceptance Tests Plan at least three months before the test.
- 11.2.3.3 The Contractor shall develop Partial Acceptance Tests procedures for each Subsystem and submit to the Employer for review at least two months before the tests.

11.2.3.4 The Partial Acceptance Tests procedures shall include:

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- i. Objectives of the Partial Acceptance Tests for all Subsystems;
- List of specifications and standards, reviewed design documentation for reference;
- iii. Step-by-step test instructions;
- iv. List of test instrument and special tools; v). Test record forms; and
- v. vi). Pass or fail criteria.
- 11.2.3.5 Where performance across interfaces to Designated Contractors or to other parties is required to be verified during the Partial Acceptance Tests, the Contractor shall include a list of Designated Contractors and the interface test procedures agreed with the relevant Designated Contractors in the Partial Acceptance Tests procedures for the relevant Subsystem.
- 11.2.3.6 The functional and timing performances of the Subsystems shall be verified against the requirements and relevant international standards.
- 11.2.3.7 All equipment settings and parameters shall be verified and recorded in the reviewed test record forms.
- 11.2.3.8 The Contractor shall perform functional check.
- 11.2.3.9 The Field Test will be performed by the JMRC on the pre-production equipment installed by the Contractor in a designated station or stations for use.
- 11.2.3.10 The Partial Acceptance Tests are considered completed only if the Employer without objection reviews the Partial Acceptance Tests results.
- 11.2.3.11 Upon completion of the Partial Acceptance Test, the individual Subsystem shall be operational and ready to be connected to other Subsystems and interfacing systems for testing.

11.2.4 SYSTEM ACCEPTANCE TESTS

- 11.2.4.1 System Acceptance Tests shall be carried out to ensure the System operates in accordance with functional and performance requirements given in the Particular Specification.
- 11.2.4.2 System Acceptance Tests shall be carried out at the stage:
- 11.2.4.3 After completion of Partial Acceptance Tests for each Subsystems; and after all individual Subsystem has been connected together and the System as a whole is capable to operate in all respect in accordance with the requirements given in the Particular Specification.
- 11.2.4.4 The Contractor shall submit a System Acceptance Tests Plan including software quality assurance plan to the Employer for review.
- 11.2.4.5 The system response time of relevant Subsystems and the System shall be tested and measured.
- 11.2.4.6 The Contractor shall carry out load test on each Subsystem to verified the designed system capacity and performance in accordance with the requirements given in the Particular Specification under full load condition.

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- 11.2.4.7 The Contractor shall carry out tests on the operation of the System in accordance with the normal operation procedures and emergency operation procedures, which has been reviewed without objection by the Employer.
- 11.2.4.8 The Contractor shall conduct tests to verify the proper inter-operation among Subsystems.
- 11.2.4.9 The System Acceptance Tests are considered completed only if the Employer without objection reviews the System Acceptance Tests results.
- 11.2.4.10 Upon completion of the System Acceptance Tests, the System shall operate in accordance with the functional and electrical performance requirements given in the PS.
- 11.2.4.11 Prior to placement of the equipment in revenue service, a limited Functional Test shall be performed on all units to confirm that the equipment is ready for revenue service. All registers and audits shall be reset to zero or recorded for reference, whichever is appropriate.
- 11.2.4.12 The Contractor shall provide all necessary support and attendance to the Employer during the Pre-Revenue Operations period in accordance with the requirements given in General Specification.
- 11.2.4.13 The Contractor shall provide on-Site supports to the Employer in all aspects related to the operation of the System. The Contractor shall also conduct investigation and provide corrective actions for any problems related to the System or the interfaces with the System.
- 11.2.4.14 The Contractor shall assign competent staff to support the Pre-Revenue Operations as required by the Employer. The persons shall have sufficient skills and knowledge of the System and have involved in either the design, installation or commissioning of the System.
- 11.2.4.15 The Contractor shall submit a manpower plan to the Employer for review at least 1 month before the commencement of the Pre-Revenue Operations.
- 11.2.4.16 The manpower plan shall include the organization chart of the Contractor's Pre-Revenue Operations supporting group, individual person's role and responsibility and 24-hour contacts for emergency cases.

11.2.5 TESTS ON COMPLETION

- 11.2.5.1 The Contractor shall carry out Tests on Completion after the completion of the System Acceptance Tests.
- 11.2.5.2 The Contractor shall co-ordinate with the Employer and with all the interfacing Designated Contractors including CC contractor to ensure all the interface test activities are completed in accordance with the program on Completion Plan.
- 11.2.5.3 The Contractor shall provide all necessary supports, conduct investigation and provide corrective actions, if necessary, to ensure all matters related to interfacing are properly resolved.
- 11.2.5.4 Within two weeks upon completion of all interface test activities, the Contractor shall submit the test results to the Employer for review.

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11.2.5.5 After the Employer without objection has reviewed the test results of all interface test activities, the Contractor shall start the reliability demonstration test in accordance with the reviewed reliability demonstration test plan.

2.2.12 Corrective Maintenance: -

- 1. The corrective/breakdown maintenance is to be carried out any time inclusive of all weekends or Holidays during the contract period. Onsite support as and when required.
- 2. In case of any failure/fault, a complaint will be logged through call and mail.
- Response time to attend any failure/breakdown of the AFC system shall not exceed as per mentioned in Minor Corrective Maintenance & Major Corrective maintenance.
- Minor Corrective Maintenance: Inclusive of Repairing and Replacement of all Spares/Components and all other associated accessories which are covered otherwise and attention of all defects other than major defects as mentioned in Clause 2.2.12 (5).
- Major Corrective Maintenance: Major failures/breakdowns are described as in which any AFC system, sub system viz. Gate, TOM etc. become nonfunctional.
 - i. Response and attending Time (Max) -02 hours
 - ii. Rectification Time (Max.) -04 hours (inclusive of response time)

2.2.13 SLA & PENALTY:

S.No	Measurement	Definition	Metric	Penalty
1	Non-availability of AFC Systems due to downtime of all Gates in a station	"Downtime" is the time duration in which the services and facilities are not available to the Employer and excludes the scheduled outages planned in advance.	For more than 25 minutes a day for non- availability of all Gates in one station.	Rs. 25000 per day per station
2	Response time	Response time is the time duration between failure reporting time and the failure attending time by the contractor	The response time should be 2 hours max	Rs. 2500 per incident per day upto max of Rs.10000 per incident
3	Rectification Time	Rectification time is the time duration between failure reporting time and the time at which failure	The rectification time should be 4 hours	Rs. 2500 per incident per day upto max of Rs.10000 per

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MEST AND			11/04/	-	response time)	er, ma

- a) The penalty amount is to be deduced in Quarterly invoice raised during DLP period.
- b) The Maximum Penalty which may be imposed in this clause is 10% of DLP amount.

2.2.14 General Conditions:

Complaint reporting Centres: Complaint regarding malfunctioning of the system will be registered by the JMRC either on phone and by email. Contractor shall issue a complaint no. for each breakdown/complain and it should be updated/recorded with same complaint no along with reporting time at CSS, JMRC (Communication System Supervisor). Complaints can be made at any time during revenue hours/non-revenue operation of Jaipur Metro.

Note: The maximum response time of attending the complaint of JMRC shall be as per clause no. 2.2.12 (5) after filling of complaint to contractor's reporting centre.

- 2) The services provided during breakdown would include for rectification of fault, technical information and assistance from the contractor. The released and defective parts shall be the property of contractor.
- Detailed failure analysis of AFC failures with very specific conclusion and recommendation is to be done by Contractor. Also downloading of logs of System to be done by contractor and it is to be provided to JMRC with analysis report.
- 4) All T&Ps and M&Ps, Testing instruments etc. required for preventive & corrective maintenance shall be arranged by the contractor. No T&P shall be supplied to contractor by the EMPLOYER.
- 5) Contractor should ensure the availability of spares of each type for rectification of failure.
- 6) Contractor is to maintain critical spares available so as to meet any exigency (if any) requirement.
- Manpower, all kinds of spares, consumables, and transportation (including loading/unloading) for attending breakdown, preventive maintenance or any kind of work related to the system shall be under the scope of contractor.
- The Maintenance and servicing report shall be submitted in triplicate, which shall be signed by Contractor and JMRC representatives. The Contractor will submit report-giving details of Preventive, Corrective and Breakdown Maintenance carried out, Date and Time.
- 9) The work is to be carried out as per International Norms/Standards and in such a manner that all premises always look Neat & Clean. Similarly, the

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waste disposal is also carried out in totally sealed manner without affecting the Environment.

- JMRC will not provide any hardware/spare part during contract period.
- The work is to be carried out under the permission of EMPLOYER' 10) 11) representative only.

- The work is to be carried out as per International Norms/Standards and in such a manner that all premises always look Neat & Clean. Similarly, the 2.2.15 waste disposal is also carried out in totally sealed manner without affecting 1)
- The work is to be carried out under the permission of EMPLOYER' 2) representative only.
- The other terms & conditions that deems fit to the bidder may be submitted along with the Bid. On review the same; it will be JMRC discretion to include 3) or not to include as the Bid conditions.

- Loss on Contractor's account: The contractor shall be liable for any loss which JMRC may sustain due to damage to the equipment/ loss of service, on 2.2.16 1) account of omissions/ commissions done by the contractor.
- The contractor should take necessary measures to cover any loss or damage caused to person or property as a consequence of any action done by the contractor. JMRC shall not be liable for any claims in any such case. Further 2) JMRC shall not be liable for similar, claims on account of the contractor's representatives suffering any loss or damage to person or property. JMRC will not take any responsibility towards insurance and other such liability.
- Security procedures at JMRC: The contractor personnel will follow all security procedures as prescribed by JMRC from time to time, for entry of personnel or 3)
- Risk of Loss or damage to JMRC property: The Contractor shall make sure that no harm or damage is made to JMRC properties and assets while executing the scope of work of this RFP. The performance security/payment 4) shall be forfeited or shall be refunded/made only after making the adjustments for any such damage made by the contractor and his staff.
- After completion of contract period, the firm/contractor handover the all system to JMRC in healthy condition without any issue. 5)

JMRC staff association: 2.2.17

JMRC shall have the right to associate its personnel with the entire work in all its phases with a view to develop their skills and understanding of systems. The contractor shall provide such personnel with all necessary information and facilities. The fact that some JMRC staff is associated with the contractor shall in no way reduce the responsibility of the contractor in any manner whatsoever.

2.2.18

The completion period for execution of the above mentioned works is 180 days from the Date of Work Order/LOA issued to Successful Bidder with 2 year of DIRECTOR (985) DLP period.

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SECTION 3

BID PRICES AND SCHEDULE OF PAYMENT

3.1 Bid Prices

- a. Unless explicitly stated otherwise in the Bid Documents, the Bidder shall be responsible for the whole works, based on the Schedule of Works, Bill of Quantities and payment shall be made as per accepted rates based on the activities carried out as in the Schedule of work specified in scope of work.
- b. The rates quoted by the Bidder are inclusive of all duties, taxes and other levies, materials, labour, compliance costs, expenses and uniform etc. But excluding GST. GST, as applicable, will be paid extra.

3.2 Schedule of Payment

i. Advance Payment will not be made. The Payment schedule for the Work/service will be as under-

S.No	Work details	Payment terms
1	Installation/Upgradation of AFC hardware at SDC platform and performing successfully testing.	
2	One entry gate, one exit gate and one TOM/SC installation/Upgradation of AFC hardware at every station & OCC and performing successfully testing.	25 % of Amount of SITC of QR based ticketing
3	installation/Upgradation of complete AFC hardware at every station & OCC and performing successfully testing	65 % of Amount of SITC of QR based ticketing
4	DLP payment	DLP amount will be paid on quarterly basis.

- ii. The currency or currencies in which payments shall be made to the supplier/
 Contractor under this Contract shall be Indian Rupees (INR) only.
- iii. LD & Penalty, if any shall be charged from the due payment of Invoice.
- iv. All remittance charges, custom clearance charges, import-export charges etc. will be borne by the supplier/ Contractor.
- v. Due payments will be made promptly, after submission of an invoice or request for payment by the supplier/ Contractor, and the purchaser has accepted it.
- vi. The Price Variation Clause is not applicable in this contract. The rate quoted shall be inclusive of all taxes and duties.
- vii. The TDS and other statuary taxes & Levies as applicable, if any would be deducted from quarterly bill.
- viii. The transportation cost shall be borne by the Bidder.

3.3 Terms & Process of Bill Payment

All the terms & conditions of the bills for payments purpose should be strictly complied in accordance with the guidelines, issued by the competent authority from time to time.

INSTURCTIONS

TO

BIDDERS (ITB)



INSTRUCTIONS TO BIDDERS (ITB)

Important Instruction: - The Law relating to procurement "The Rajasthan Transparency in Public Procurement Act, 2012" (hereinafter called the RTPP Act) and the "Rajasthan Transparency in Public Procurement Rules, 2013" (hereinafter called the RTPP Rules) under the said Act have come into force which are available on the website of State Public Procurement Portal http://sppp.rajasthan.gov.in. Therefore, the Bidders are advised to acquaint themselves with the provisions of the ACT and Rules before participating in the Bidding process. If there is any discrepancy between the provisions of the Act and Rules and this Bidding Document, the provisions of the ACT and Rules shall prevail. In clauses where references have been made of RTPP Act and RTPP Rules, Bidders are advised to look into the respective latest and updated clause of RTPP Act and Rules for detailed guidelines.

1.0 GENERAL GUIDELINES:-

- a. This Bid Document does not purport to contain all the information that each bidder may require. Bidders are requested to conduct their own investigations and analysis and to check the accuracy, reliability and completeness of the information in this Bid Document before participating in the bid process. JMRC Ltd. makes no representation or warranty and shall incur no liability under any law, stature, rules & regulations in this regard. Information provided in this Bid Document is only to the best of the knowledge of JMRC Ltd.
- b. Bidders should read carefully the contents of this document. Each page of the Bid Document (including General Conditions of Contract), Addendum (if any) and other submissions, before submission of the bid, may be Numbered, Signed & Stamped, as a token of acceptance of terms and conditions of this bid. Any unsigned and unstamped document may not be considered for evaluation. The signature is required to be done by the bidder itself/ authorized signatory of the Bidder for which a valid power of Attorney shall be enclosed. All documents shall be submitted in English Language.
- c. Bidders may be single firms or may be members of a JV/Consortium. Bidders may read carefully the directions concerning the requirements for JV/Consortium.
- d. Bidders should provide all the required technical and associated information and attach supporting documents as earmarked / mentioned signed by the bidder/authorized signatory of the bidder and attested by competent authority wherever asked.
- e. For any query from bidder, JMRC reserves the right not to offer clarifications on any issue raised in a query. No extension of any deadline will be granted for JMRC having not responded to any query or not provided any clarification.
- f. Bidder should clearly note the date and time of submission of Bid. Late or delayed Bids will not be accepted by the website. Bidders are reminded that no supplementary material will be entertained by JMRC and Technical Evaluation will be carried out only on the basis of submissions received by JMRC by the date/ time of the bid submission. However JMRC may ask for

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any supplementary information, if required. The bidder should furnish the same within 7 days of receipt of query from JMRC. Any information received after stipulated date shall be liable to be rejected and bid shall be evaluated on original information only.

- g. It should be noted that JMRC will not discuss any aspect of the evaluation process. Bidders will deem to have understood and agreed that no explanation or justification of any aspect of the selection process will be given by JMRC.
- h. Bidders will not be considered if they make any false or misleading representations in statements / attachments. If any submission is found false or misleading, even at later stage i.e. after completion of process then also JMRC may annul the award of work and forfeit Performance/ Bid Security Amounts (if any available). Further the bidder may be blacklisted for participation in any future bid of JMRC.
- i. Bidders may remain in touch with the E-proc portal https://www.eproc.rajasthan.gov.in and JMRC's website http://transport.rajasthan.gov.in/jmrc or state procurement portal https://sppp.rajasthan.gov.in/for any kind of latest Information. Addendum, Clarification, etc.
- j. The words "Tender" and "Bid" have been used interchangeably in this Bid Document.
- k. Bidders shall be required to submit declaration under Section 7 of RTPPA, 2012 as per Form-T-VII.

1.1 INTRODUCTION

Jaipur Metro Rail Corporation (JMRC) Ltd. invites Request for proposal through Open tender (Single Stage Two envelope) "QR Ticketing Implementation in AFC System of Phase-1A & Phase-1B of Jaipur Metro Rail Corporation Ltd.", through e-tendering process.

Jaipur Metro Rail Corporation Limited hereinafter called the 'Employer', for Works in accordance with this Bid Package.

Bids shall be prepared and submitted in accordance with the instructions given herein.

1.2 Relevant address for correspondence related to this Bid is given below:-

> Director (O&S), JMRC, 4th floor, Admin Building, Metro Depot, Bhrigu Path, Mansarovar, Jaipur-302020. Email: dos@jaipurmetrorail.in, edst@jaipurmetrorail.in, mgrtel@jaipurmetrorail.in.

1.3 Who can Apply

1.3.1 Bidder may apply themselves or in Partnership/Joint Venture/Consortium. Requirements from JV/Consortiumare chalked out in Clause 9.0 below. DIRECTOR (O&S)
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2.1 All tenders submitted shall include the following information:

- 2.1.1 General information of the Bidder shall be furnished along with certified copies of original documents defining the constitution and legal status, certificate of registration and ownership, principal place of business of the company, corporation, firm or partnership.
- 2.1.2 In the case of tender by a partnership firm, the following requirements shall also be complied with.
 - a. The Bidder and in the case of a successful tender, the Form of Agreement, shall be individually signed so as to be legally binding on all partners as the case may be.
 - b. In case of partnership, one of the partners shall be nominated as being Incharge as Lead or Prime Partner and this authorization shall be evidenced by submitting a power of attorney signed by the partners or legally authorized signatories of all the partners.
 - c. The partner In-charge as aforesaid shall be authorized to incur liabilities and receive instructions for and on behalf of any and all the partners of the firm and the entire execution of the contract including payment shall be carried out exclusively through the partner In-charge of the firm.
- 2.2 The Bidder to qualify for award of Contract shall submit a written power of attorney authorizing the signatory to sign the tender document on behalf of the Bidder.
- 2.3 Each page of tender shall be signed by the authorized signatory of the Bidder. Power of Attorney in favour of the signatory will be required to be furnished.
- 2.4 Cancellation or creation of a document such as Power of Attorney, Partnership deed, Constitution of firm etc., which may have bearing on the tender/contract shall be communicated forthwith in writing by the Bidder to the Engineer and the Employer.
- Any information found incorrect or suppressed, the tender may not be considered or contract will be cancelled without any financial claim/arbitration from the bidder. The Bidder is required to certify in the statement placed at Appendix I-'A' of ITB.

3.0 COST OF BIDDING

3.1 The agency shall bear all costs associated with the preparation and submission of his Bid and the Employer will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the Bidding process.

4.0 SITE VISIT

4.1.1 Site information / schedule of works given in this Bid document areas per our requirements. The Bidder is advised to visit and examine the Site of Works and its surroundings at his cost and study the work requirement and note down all information that may be necessary for participating in the Bid and entering into this Contract.

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The agency shall be deemed to have inspected the Site and its surroundings 4.1.2 beforehand and taken into account all relevant factors pertaining to the Site in the preparation and submission of the Bid.

5.0 BID DOCUMENT (CONTENTS OF BID DOCUMENTS)

The Bidder is expected to examine carefully all the contents of the Bid 5.1 documents as mentioned in Sub-clause 1.0 of ITB including instructions, conditions, forms, terms, specifications and take them fully into account before submitting his offer. Failure to comply with the requirements as detailed in these documents shall be at the Bidder's own risk. Bids that are not responsive to the requirements of the Bid documents will be rejected.

AMENDMENT TO BID DOCUMENTS 6.0

- At any time prior to the deadline for the submission of Bids, JMRC may, for 6.1 any reason, whether at his own initiative or in response to a clarification or query raised by a prospective Bidder, modify the Bid documents by an amendment.
- The said amendment in the form of an addendum will be available on web site 6.2 and can be downloaded. The prospective bidder needs to keep himself updated by visiting the Jaipur Metro Rail Corporation website / www.eproc.rajasthan.gov.in website regularly before the date of submission of
- In order to afford prospective Bidders reasonable time for preparing their Bids 6.3 after taking into account such amendments, the Engineer or the Employer may, at his discretion, extend the deadline for the submission of Bids as specified at Sub-clause 15.0 of ITB.

LANGUAGE OF BID 7.0

The Bid prepared by the Bidder and all correspondence and documents relating to the Bid exchanged between the Bidder and the Employer/Engineer shall be in the English language. The documents submitted by the bidder will not be returned by JMRC to Bidder.

8.0 DOCUMENTS COMPRISING THE BID

Documents to be submitted by the Bidder under Bid package have been 8.0.1 described in this clause. Also refer check list as per Appendix - I 'A' of ITB. This list of documents has been prepared mainly of the convenience of the

> Bidder and any omission on the part of the Employer shall not absolve the Bidder of his responsibility of going through the various clauses in the Bid Documents including the specifications and to submit all the details specifically called for (or implied) in those clauses.

All documents issued for the purposes of Biding as described in Clause 1.0 of 8.0.2 ITB, and any amendments issued in accordance with Clause 6.0 of ITB shall DIRECTOR (O&S)
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8.0.3 BID PACKAGE

For the purpose of selection of Bidder, the bid document is divided into two parts viz. the Technical Bid and the Financial Bid.

8.1 Technical Bid

8.1.1 The requirements for Technical Bid are as under:-

The bidder (lead member in case of JV/Consortium) shall enclose signed and stamped copy of the Bid Document <u>except BOQ</u>. Besides this all other associated/requited documents shall be submitted duly numbered and signed and stamped by the bidders. All applicable Annexure/Performa shall be duly filled by the Bidder.

The scanned copy of instruments (i.e. BG/DD/BC) of Cost of Bid Form, Bid Security Amount, E-Biding Processing Fee and notarized Form-F on non-judicial stamp paper of Rs. 100 shall be enclosed by the bidder with the technical Bid.

- 8.1.2 Power of Attorney in the name of Authorized Signatory, in case the documents are signed by the authorized signatory of the bidder.
- 8.1.3 The bidder shall be required to enclose signed/stamped copy of valid registrations with the following:
 - i) Registrar of Companies (in case bidder being a company)
 - ii) GST Registration(along with copy of latest Challan)
 - iii) Any other documents as required to prove eligibility.

In case of a JV/Consortium, the above documents shall be mandatorily submitted for all the constituent members.

- 8.1.4 Each bidder (each member in the case of a JV/Consortium) shall be required to confirm and declare with the bid submission that no agent, middleman or any intermediary has been, or will be, engaged by them to provide any services, or any other items or works related to the award and performance of the Contract. They will have to further confirm and declare that no agency commission or any payment which may be construed as an agency commission had been, or will be, paid and that the bid price will not include any such amount.
- 8.1.5 The bidder shall be required to enclose the Check List for submission of bid as in Appendix-I-'A' of the ITB.
 - (a) Self-Attested copy of the latest GST registration certificate and copy of Latest GST Return and Attested copy of PAN No. under income Tax Act is required to be submitted. In the absence of registration detail with GST department and PAN No etc first payment shall not be released.
 - (b) Bid documents as listed below:
 - I. Notice Inviting Bid
 - II. Scope of Work
 - III. Bid Prices and Payment Schedule

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- Instructions to Bidders. IV.
- Jaipur Metro Rail Corporation's General Conditions of Contract V.
- (c) The methods proposed to execute the activities covered in the Scope of Work, including such detailed information as deemed relevant.
- (d) Contractual Experience record may be furnished in the format prescribed in Form T-II.
- Form of Bid (Form- A). (e)
- Financial Record of the bidder (Form-T-I).

Bidders may attach clearly marked and referenced continuation sheets in the event that the space provided in the Evaluation Performa are insufficient.

Bidders are advised to submit only one bid either by themselves, or as a partner in a joint venture, or as a consortium. If a Bidder, or if any one of the partners in a joint ventures, or any one of the members of the consortium participates, submits more than one bid, all the bids in which the Bidder has participated shall be considered invalid.

8.2 Financial Bid:-

- Financial bid shall contain the Bill of Quantities (BOQ) as per the uploaded 8.2.1 standard template in excel sheet.
- 8.2.2 The prices shall be entered in the **BOQ** template as uploaded on the website. These prices should include all costs and expenses associated with the contract excluding GST.

9.0 JV/Consortium:-

- There can be a maximum of 3 (three) members in a JV/Consortium. 9.1
- The technical and financial capabilities of only those members with equity 9.2 stake equal to or greater than 26% in the JV/Consortium shall be considered relevant for evaluation. It is clarified that the technical experience and financial capabilities of any other Group Company or holding company or subsidiary company of any bidder / JV/Consortium member shall not be considered for evaluation unless such company is also a part of the JV/Consortium with minimum 26% stake in the shareholding of the JV/Consortium.
- 9.3 The JV/Consortium as a whole (with cumulative effect) may satisfy the eligibility criteria i.e. the Technical Bid.
- 9.4 Each JV/Consortium must specify the proposed equity shareholding (FORM-G) and nominate a Lead Member of the consortium. This shall be enshrined in the Memorandum of Agreement signed by all JV/Consortium members and submitted along with the Bid. The Consortium agreement should be on nonjudicial stamp paper signed by each & every authorized signatory along with their copy of authorized Power of Attorney duly notarized. A draft of the consortium agreement is there at FORM- Hof this Bid Document. DIRECTOR (O&S)

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- 9.5 If the successful bidder is a consortium of firms, the Contract Agreement shall be signed with entire consortium i.e. all the consortium members shall be party to the Contract Agreement.
- 9.6 There will be no change in the consortium's proposed shareholding structure in the submitted Bid, till the completion of the contract in all respect.
- 9.7 (a) all parties to the Joint Venture shall sign the bid and they shall be jointly and severally liable; and
 - (b) a Joint Venture shall nominate a representative who shall have the authority to conduct all business for and on behalf of any or all the parties of the Joint Venture during the bidding process. In the event the bid of Joint Venture is accepted, either they shall form a registered Joint Venture company/firm or otherwise all the parties to Joint Venture shall sign the Agreement.
- 9.8 All members of the JV/Consortium shall be liable jointly and severally, for the execution of the project in accordance with the terms of the Contract Agreement. However, a single performance guarantee from the lead member only shall be submitted for the consortium.
- 9.9 Any individual bidder or member of a JV/Consortium cannot be a member in another JV/Consortium and participate in this Bid.
- 9.10 Any member of JV/Consortium shall not have been blacklisted/debarred.

10.0 BID PRICES

- Bidder is required to quote for items as per Bid document. The Bidder should submit his Bid, which conforms to Bid documents, without material deviations, omissions or reservations. No material deviations or reservations shall be permitted. Bid shall be deemed to comply with all the requirements in the Bid documents including employer's requirements irrespective of any mention to the contrary, anywhere else in the Bid.
- The Rate and Prices quoted by the Bidder shall be applicable for the duration of the contract.
- The rate quoted shall be reasonable and not unbalanced. If the Procuring Entity comes across any unbalanced rates, he may require the Bidder to furnish detailed analysis to justify the same. If after its examination, the Procuring Entity still feels the rates to be unbalanced, he may ask the Bidder for additional performance Security or other safeguards to protect Employer's interest against financial loss. If the Bidder fail to comply with this, his Bid shall be liable to be rejected by the Employer.
- 10.4 The Bidder shall keep the contents of his Bid and rates quoted by him confidential.
- 10.5 The Bidder should quote his rates in the Bid without taking into the consideration of GST. GST will be reimbursed on actual basis of claim.

11.0 CURRENCIES OF THE BID

11.1 Bid prices shall be quoted in Indian Rupees only.

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12.0 BID VALIDITY

- The Bid shall remain valid and open for acceptance for a period of 90 days 12.1 from the Last date of submission of Bid.
- In exceptional circumstances, prior to expiry of the original Bid validity 12.2 period, the Employer/the Procuring Entity may request the Bidders for a specified extension in the period of validity. The request and the response thereto shall be made in writing or by Tele-fax. A Bidder may refuse the request without forfeiting his Bid Security, A Bidder agreeing to the request, shall not be required or permitted to modify his Bid but will be required to extend the validity of his Bid security correspondingly.

BID SECURITY 13.0

- The Bidder shall furnish, as Bid Security an amount as mentioned in clause 13.1 1.1.2 of NIB and also refer The Rajasthan Transparency in Public Procurement Rules, 2013, clause 42. Being a service contract concessional bid security clause is not applicable in this bid.
- Security shall be deposited only through 13.2 Cheque/Demand Draft and Bank Guarantee.
- 13.3 The Bid Security shall be deposited through Bankers Cheque/Demand Draft and Bank Guarantee of nationalized Bank in the name of Jaipur Metro Rail Corporation Ltd., Jaipur. The Bidder needs to upload scanned copy of DD/Bankers cheque at website http://eproc.rajasthan.gov.in for e-Biding.
- Any Bid not accompanied by an acceptable Bid Security shall be summarily 13.4 rejected as being non-responsive.
- 13.5 The Bid securities of unsuccessful Bidder shall be discharged/returned by the Employer only after award of the LOA to successful Bidder. In this connection, Clause 25.3 of ITB may also be referred to.
- The Bid Security of the successful Bidder shall be returned upon the Bidder 13.6 executing the Contract Agreement and after furnishing the required performance guarantee for performance, as mentioned in Clause 26.0 of ITB.
- 13.7 The Bid Security shall be forfeited:

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- If a Bidder withdraws his Bid during the period of Bid validity, or a.
- In case of a successful Bidder, if he fails to: b.
- Furnish the necessary performance guarantee for performance as per (i). Clause 26.0 of ITB.
- (ii). Commence the work as per terms & conditions of Bid after issuance of
- (iii). Enter into the Contract within the time limit specified in Clause 25.0 of ITB

13.8 No interest will be payable by the Employer on the Bid Security amount cited above. DIRECTOR (O&S)
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14.0 FORMAT AND SIGNING OF BIDS

- 14.1.1 If the Bid is submitted by a proprietary firm it shall be signed by the proprietor above his full name and the full name of his firm with its current address, telephone no. Fax no. and email if any.
- 14.1.2 If the Bid is submitted by a firm in partnership, it shall be signed by a partner holding the power of Attorney for the firm. A certified copy of the partnership deed and power of attorney shall accompany the Bid. Alternatively, all the partners shall sign it.
- 14.1.3 If the Bid is submitted by a limited company or a limited corporation, it shall be signed by a duly authorized person holding the power of attorney for the firm, a certified copy of the power of attorney shall accompany the Bid.
- 14.1.4 The documents required to be submitted by the Bidder will be as described under Clause 8.0 of ITB herein. (Also refer check list as per Appendix I-'A' of ITB)
- 14.3 Entries to be filled in by the Bidder shall be typed or written in indelible ink. The person submitting the Bid along with the date of signing should sign each page of such document in full at the bottom. The person submitting the Bid along with the date of initialling should initial each page of printed documents at the bottom.
- In case of all documents listed in Clause 8.0 above, the person signing/initialling the documents shall be one who is duly authorized in writing by or for and on behalf of the Bidder and /or by a Statute Attorney of the Bidder Such authority in writing in favour of the person signing the Bid and/or the Power of Attorney as per Form-K executed on Non-Judicial Stamp Paper of Rs. 100, shall be enclosed along with the Bid.
- The complete Bid shall be without alterations, overwriting, interlineations or erasures except those to accord with instructions issued by the Employer, or as necessary to correct errors made by the Bidder. The person signing the Bid shall initial all amendments/corrections.
- 14.6 All witnesses and sureties shall be persons of status and probity and their full names, occupations and addresses shall be written below their signatures.

15.0 SEALING AND MARKING OF BIDS

Online Bids will have to be digitally signed and submitted in a time stamped electronic sealed box on http://eproc.rajasthan.gov.in the manner as described in 15.0

15.2 **ONLINE SUBMISSION:**

The Bid to be submitted in two envelopes method on http://eproc.rajasthan.gov.in It shall comprise of:-

- (a) Complete Bid document along with addendums/amendments issued and uploaded by the department on the above website.
- (b) Bid Form and schedules.
- (c) Supporting documents(scanned electronic copies)

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Deadline for Submission of Bids: - Bids shall be received online on website http://eproc.rajasthan.gov.in with uploading all relevant documents not later than the time and date communicated by the department or extended date thereof.

15.3 Pre-Bid Meeting.

- A pre-Bid meeting shall be held on the date and location given in the clause 15.3.1 1.1.2 of the NIB. Online meeting link will be shared to prospective bidders who request for online pre bid meeting vide e-mail mentioned in this NIB
- 15.3.2 The purpose of meeting will be to clarify issue and to answer the question on any matters that may be raised at that stage.
- The Bidder is requested to submit any question in writing or by facsimile/ 15.3.3 email, to reach the Procuring Entity not later than the last date of seeking clarification as mentioned in key details of NIB.
- The text of the questions raised by the Bidders and the response given will be 15.3.4 transmitted without delay to all purchasers of the Bids documents. Any modification of Bid documents, which may become necessary as result of the Pre-Bid meeting, shall be made by the Procuring Entity along with the issue of Addendum/clarification E-proc portal https://www.eproc.rajasthan.gov.in and JMRC's website https://transport.rajasthan.gov.in/jmrc or state procurement portal https://sppp.rajasthan.gov.in/
- Non attendance at the pre-Bid meeting will not be a cause for disqualification 15.3.5 of a Bidder. Bidders, however, in their own interest are advised to associate with the pre-bid process to clarify any issues. Any material deviations/ reservations proposed by the bidders after pre-bid stage shall not be entertained.

16.0 SUBMISSION OF BIDS

- 16.1 Submission of bids only through online process is mandatory for this Bid. Bids sent by Post, FAX or e-mail or presented in person will not be considered.
- The Bidder should get himself registered on procurement portal 16.2 (http://eproc.rajasthan.gov.in) and create users and assign roles on this portal. Further to this, bidder shall download Notice Inviting Bids (NIB) and copy of Bid Document from this site.
- 16.3 To participate in online bidding process, Bidders must procure a Digital Signature Certificate as per Information Technology Act-2000 using which they can digitally sign their electronic bids. Bidders can procure the same from any CCA approved certifying agency, i.e. TCS, safe crypt, N-code, etc. bidders who already have a valid Digital Signature Certificate (DSC) need not procure a new DSC.
- 16.4 Bidder (authorized signatory) shall submit their offer on-line in Electronic formats both for technical and financial bid. The technical bid should also contain scanned copy of DD/BC/BG (Cost of Bid Form, E-Bid Processing Fee, Bid Security and notarized Form-F on non-judicial stamp paper of Rs. 100). Page 52 of 103 However, DD/BC/BG for Cost of Bid Form, E-Bid Processing Fee, Bid Security

and notarized Form-F on non-judicial stamp paper of Rs. 100 Should be submitted physically at the following address of JMRC before the scheduled date and time as per NIB.

Director (O&S), JMRC, 4th floor, Admin Building, Metro Depot, Bhrigu Path, Mansarovar, Jaipur-302020.

- JMRC will not be responsible for delay in online submission due to any reason. For this, bidders are requested to upload the complete bid well in advance so as to avoid last minute issues like slow speed; choking of web site due to heavy load or any other unforeseen problems.
- 16.6 Utmost care should be taken to name the files /documents to be uploaded on portal. There should not be any special character or space in the name of file, only underscores are permissible.
- 16.7 All pages of the bid document and the addendums/amendments uploaded by the JMRC on the websitehttp://eproc.rajasthan.gov.inshall be deemed to have been initialled and accepted by the persons signing the bid when they submit their electronic bid.
- 16.8 The documents listed in ITB clause along with the addendum uploaded till the date of bid submission, shall be filled by the bidder to bind the bidder to the contract. All the pages of the bid documents shall be digitally signed.
- 16.9 The uploaded documents for e-bidding cannot be changed after closing date of bid and same documents are to be produced in original physical form in the office whenever asked to do so.
- Any Bid in which any of the prescribed conditions are not fulfilled or which have been vitiated by errors in calculations, totalling or other discrepancies or which contain tempering of BOQ templates, may BE LIABLE FOR REJECTION.
- 16.11 Any bid after the deadline of time, will not be received on website.
- 16.12 Single-stage two envelope selection procedure shall be adopted. The Bid shall contain:

a) Part-A: Technical Bid

This Part should contain the technical Bid consisting of a pdf copy of this Bid Document along with addendums with each page signed by the Bidder in acceptance of the terms and conditions therein, along with scanned copy of all the required documents, DD/BC/BG with due Appendix-1 'A' duly filled as detailed below, in support of eligibility.

- Complete bid document along with addendums/amendments issued and uploaded by the department on the above website.
- ii. Bid form, formats, Performa, annexure(s) duly filled and signed.
- iii. Supporting documents to substantiate eligibility
- iv. Scanned copies of financial instruments (Cost of Bid Form, E-Bid Processing Fee & Bid Security)
- v. Any other documents, Bidder deem fit but NOT the Financial Bid/BOQ.

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All such Forms should be duly filled, signed & scanned (In .PDF/.JPG/.JPEG) and to be submitted online as part of technical bid.

No price bid should be indicated at any place in the technical Bid, otherwise the proposal shall be summarily rejected.

(b) Part-B: Financial Bid (BOQ).

This part should contain the financial Bid in the prescribed Format. Rate quoted should be as per clause 10.2 to 10.5 & 8.0 of ITB.

Utmost care should be taken to upload Financial Bid. Any change in the format of Financial Bid file shall render it unfit for bidding. Following Steps may be followed in submission of Financial Bid.

- i. Download format of financial bid in XLS format (Password protected file).
- ii. This XLS file is password protected file. Don't unprotect the file. Price has to be filled in this file and the same has to be uploaded.
- iii. Fill Bidder Name, percentage rate (Less/Excess) to the estimated cost in down loaded Financial Bid format as specified (in XLS format only) in green back ground cells. Don't fill in any other back ground cells.
- iv. Save filled copy of downloaded financial bid file in your computer and remember its name & location for uploading correct file (duly filled in) when required.

17.0 PHYSICAL SUBMISSION OF FINANCIAL INSTRUMENTS

- i. Financial instruments of Bid Security, Cost of Bid Form and Tender Processing Fee must be submitted at the office of Director (O&S), JMRC, 4th floor, Admin Building, Metro Depot, Bhrigu Path, Mansarovar, Jaipur-302020. It shall be the responsibility of the Bidders to ensure that his financial instruments reach the designated place/office before the dead line for submission.
- Financial instruments received after due date and time shall not be accepted.
- iii. JMRC will not be responsible for delay, loss or non-receipt of Financial instruments DD/BG/BC etc by post or courier.
- iv. JMRC will not be responsible for financial instruments delivered to any other place/person in JMRC (like DAK section etc.) other than the designated office and do not reach the designated officers before the deadline for its submission.

18.0 BID OPENING

The duly authorized Committee of JAIPUR METRO RAIL CORPORATION will open the Bids in the presence of Bidder(s) or their authorized representative(s) who may choose to be present at the time of Bid opening, if the Bidder wishes. The Bids shall be opened in two stages, in first stage the **Technical Bid** shall be opened and evaluated. The **FINANCIAL BID** (**BOQ**) shall be opened of responsive Bidders pre-qualified by competent authority in the evaluation of

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Technical Bid at a later date, which will be informed to all responsive and prequalified Bidders through e-procurement portal.

In the first stage, technical bid will be opened. The Bidders' names, the presence (or absence) of Cost of Bid Documents/ E-Bid Processing Fee and Bid Security, and other details proposed in covering letter, will be announced by the Bid Opening Committee at the time of opening or same shall be available at the web-site. The bid opening committee will prepare the summary report of bid opening.

18.3 PRELIMINARY EXAMINATION OF BIDS

The contents of the technical-bid documents of the individual Bids will be examined summarily in order to assess their formal conformity and agreement with the instructions and guidance to the Bidders and the completeness. Any Bid not conforming to any of these requirements may be disqualified forthwith at the discretion of JAIPUR METRO RAIL CORPORATION.

19.0 PROCESS TO BE CONFIDENTIAL

- 19.1 Except the public opening of Bid, information relating to the examination, clarification, evaluation and comparison of Bids and recommendations concerning the award of Contract shall not be disclosed to Bidders or other persons not officially concerned with such process.
- Any effort by a Bidder to influence the Employer/Procuring Entity in the process of examination, clarification, evaluation and comparison of Bids and in decisions concerning award of contract, may result in the rejection of the Bidders Bid.

20.0 CLARIFICATION OF BIDS

20.1 To assist in the examination, evaluation and comparison of Bids, the Procuring Entity may ask Bidders individually for clarification of their Bids, including breakdowns of prices. The request for clarification and the response shall be in writing or by tele-fax but no change in the price or substance or the Bid shall be sought, offered or permitted.

21.0 DETERMINATION OF RESPONSIVENESS

- 21.1 Prior to the detailed evaluation of Bids, the Procuring Entity will determine whether each Bid is responsive to the requirements of the Bid documents.
- For the purpose of this Clause, a responsive Bid is one, which conforms to all the terms, conditions and specifications of the Bid documents.
- If a Bid is not substantially responsive to the requirements of the Bid documents, it will be rejected by the Procuring Entity, and will not subsequently be permitted to be made responsive by the Bidder by correction or withdrawal of the non-conformity or infirmity.
- 21.4 The decision of the Procuring Entities to which of the Bids are not substantially responsive shall be final.

22.0 EVALUATION OF BID

The Employer will, keeping in view the contents of Clause 1.3 & 8.0 of ITB, carry out technical evaluation of submitted technical proposals to determine

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that the Bidder has a full comprehension of the work of the contract. Where a Bidder's technical submittal has a major inadequacy, his Bid will be considered to be non-compliant and will be rejected.

- All technically acceptable Bids will be eligible for consideration of their financial proposals. The Firms who get technically qualified will be intimated by the Jaipur Metro Rail Corporation. The financial proposal shall be evaluated to determine the lowest bidder (L-1).
- Offers, deviations and other factors, which are in excess of the requirements of the Bid documents or otherwise will result in the accrual of unsolicited benefits to the Employer, shall not be taken into account in Bid evaluation.
- Evaluation of financial proposal will be based on pricing schedule/quantities in Bill of Quantity (BOQ) and rates quoted. Any alteration in BOQ will not be given any cognizance.
- 22.5 The Procuring Entity reserves the right to ask for submission of the source of procurement for the material for which the bidder has quoted his rates before the bid can be considered for acceptance. If the bidder, who is called upon to do so, does not submit within a reasonable time of written order to do so, JAIPUR METRO RAIL CORPORATION shall be at liberty to forfeit the said earnest money absolutely.

23.0 AWARD OF CONTRACT

CRITERIA FOR AWARDING OF TENDER

23.1 Subject to Clause 10.3 and 22.0, Procuring Entity will award the contract to the Lowest Bidder (L1), whose bid has been determined to be substantially responsive, technically &financially suitable, complete & in accordance with the bid document.

24.0 EMPLOYER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

24.1 Notwithstanding Clause 23.0, the Employer reserves the right to accept or reject any Bid, and to annul the Bid process and reject all Bids, at any time prior to award of Contract, or to divide the Contract between/amongst Bidders without thereby incurring any liability to the affected Bidder or Bidders or any obligations to inform the affected Bidders of the grounds for the Employer's action.

25.0 NOTIFICATION OF AWARD

25.1 Prior to the expiry of the period of Bid validity prescribed by the Procuring Entity will notify the successful Bidder by E-mail/fax, to be confirmed in writing by registered letter, that his Bid has been accepted. This letter (hereinafter and in the Conditions of Contract called 'the Letter of Acceptance') shall name the sum which the Procuring Entity will pay to the Bidder in consideration of the execution, completion of the works by the Bidder as prescribed by the Contract (hereinafter and in the conditions of Contract called 'the Contract price'). The "Letter of acceptance" will be sent in duplicate to the successful Bidder, who will return one copy to the Procuring Entity duly acknowledged and signed by the authorized signatory, within seven days

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from the date of issue of LOA by him. No correspondence will be entertained by the Procuring Entity from the unsuccessful Bidders.

- 25.2 The Letter of Acceptance will constitute a part of the contract.
- 25.3 Upon "Letter of acceptance" being signed and returned by the successful Bidder as per Clause 25.1, the Procuring Entity will promptly notify the unsuccessful Bidders and discharge / return their Bid securities.

26.0 SIGNING OF AGREEMENT

- The Procuring Entity shall prepare the Agreement in the Performa (Form-D) 26.1 included in this Document, duly incorporating all the terms of agreement between the two parties. Within 15 days from the date of issue of the letter of acceptance, the successful Bidder will be required to execute the Contract Agreement. The Contract Agreement shall be executed on Rajasthan Stamp duty of Rs. 1000/- as per Rajasthan Stamp Act 1998. The performance guarantee should be submitted immediately after issue of letter of acceptance but not later than the agreement is signed between the parties. One copy of the Agreement duly signed by the Procuring Entity and the Bidder through their authorized signatories will be supplied by the Procuring Entity to the Bidder.
- 26.2 Prior to signing of the Contract Agreement, the successful Bidder shall submit the following document within a period of 15 days from the date of issue of the Letter of Acceptance:
 - a. Performance Guarantee
 - b. Consortium Agreement (duly signed & executed) duly incorporating the requirements as in Clause No.9.0 of the ITB.

27.0 PERFORMANCE SECURITY

The successful Bidder shall furnish to the Procuring Entity a performance 27.1 security in the form of a bank guarantee for an amount of 10% of the Contract price. The validity shall be six months beyond expiry of contract. The Bank Guarantee has to be from a scheduled Commercial Bank based in India and the Form of performance security (Form-C) provided in this Volume shall be used. The performance Security shall be furnished within the time limit specified in Clause 26.0. The Performance Security shall be deposited through Demand Daft, Banker's Cheque, Government Securities or Bank Guarantee.

> The Performance Security (Bank Guarantee) shall be executed on Rajasthan Stamp duty which is payable @0.25 percent of the Work Order/LOA amount subject to maximum of Rupees 25000/-as per Rajasthan Stamp Act 1998

27.2 Additional Performance Security.-

In addition to Performance Security as specified in rule 75, an Additional (1)Performance Security shall also be taken from the successful bidder in case of unbalanced bid. The Additional Performance Security shall be equal to fifty percent of Unbalanced Bid Amount. The Additional Performance Security shall be deposited in lump sum by the successful bidder before execution of Agreement. The Additional Performance Security shall be deposited through e-809147 S 40

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Grass, Demand Daft, Banker's Cheque, Government Securities or Bank Guarantee.

Explanation: For the purpose of this rule,-

- (i) Unbalanced Bid means any bid below more than fifteen percent of Estimated Bid Value.
- (ii) Estimated Bid Value means value of subject matter of procurement mention in bidding documents by the Procuring Entity.
- (iii) Unbalanced Bid Amount means positive difference of eighty five percent of Estimated Bid Value minus Bid Amount Quoted by the bidder.
- (2) The Additional Performance Security shall be refunded to the contractor after satisfactory completion of the entire work. The Additional Performance Security shall be forfeited by the Procuring Entity when work is not completed within stipulated period by the contractor. Provision for 'Unbalanced Bid' and 'Additional Performance Security' shall be mentioned in the Bidding Documents by the Procuring Entity.]
- 27.3 Failure of the successful Bidder to submit the required performance Security shall constitute sufficient grounds for the annulment of the award of Contract and forfeiture of the Bid Security.

28.0 CANCELLATION OF LETTER OF ACCEPTANCE (LOA) & FORM OF BID

In case successful Bidder fails to commence the work (for whatsoever reasons) as per terms & conditions of Bid after issuance of LOA& Letter of commencement then the LOA shall be cancelled and the Bid security shall be forfeited.

29.0 CORRUPT & FRAUDULENT PRACTICES

JMRC requires that the Bidders observe the highest standards of ethics during bidding and execution of this contract. In pursuance with this policy, the bidder shall be required to submit their compliance with the code of integrity and no conflict of interest as per **Form T-VI**.

30.0 GRIEVANCE/ REDRESSAL DURING PROCUREMENT PROCESS

If any bidder or prospective bidder is aggrieved about a decision/ action/ omission of JMRC, he may file an appeal as per provisions of Section 38 of RTPPA, 2012. The relevant provisions of grievance redressal mechanism are provided in **Form-T-VIII**.

31.0 QUANTITY VARIATION

JMRC may vary the quantity as per RTPPR Rule-73.

32.0 TERMINATION OF THE CONTRACT

32.1 If the Contractor fails to carry out any of his obligations, or if the Contractor is not executing the Works in accordance with the Contract, the Engineer may

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give notice to the Contractor requiring him to make good such failure and remedy the same within such time as the Employer / Engineer may deem to be reasonable.

- 32.2 The Employer shall be entitled to terminate the Contract if the Contractor or any one of its constituents,
 - a) fails to comply with a notice under Sub clause 32.1
 - b) abandons or repudiates the Contract
 - c) without reasonable excuse acceptable to the Engineer, fails to commence the Works in accordance with the Contract
 - d) sub contracts the whole of the Works or assigns the Contract without approval of the Employer
 - e) becomes bankrupt or insolvent or goes into liquidation except voluntary liquidation for the purpose of amalgamation or reconstruction
 - f) persistently disregards instructions of the Engineer or contravenes any provisions of the Contract, or
 - g) fails to remove materials from the Site, or pull down and replace work, after receiving notice from the Engineer to the effect that the said materials or Works have been condemned or rejected, or
 - h) fails to take steps to employ competent and/or additional staff and labour, or
 - i) fails to afford the Engineer or his representative proper facilities for inspecting the Works or any part thereof, or
 - j) indulges in corrupt or fraudulent practices
 - k) Breach of any of the contract condition during execution.
- 32.2.1 In any one of these events or circumstances, the Employer may upon giving 14 days notice to the Contractor, terminate the Contract and expel the Contractor from the Site. However, in case of sub-paragraph (e) or (j), the Employer may by notice of 7 days terminate the Contract immediately.
- For the purpose of sub Para (c) above, this clause, reasonable excuse shall be one, which in the opinion of the Engineer has resulted from, Any Circumstance which
 - is beyond the employer's or contractor's control and
 - made the failure unavoidable and it is evidenced by the Contractor to the satisfaction of the Engineer that the failure was remedied without unreasonable delay once that obstacle was out of the way.
- 32.2.3 The Employer's decision to terminate the Contract shall not prejudice any other rights of the Employer under the Contract.
- 32.2.4 On termination of contract due to contractor's default the performance security shall be forfeited by encasing the bank guarantee and the balance

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work shall be got done independently without risk and cost of the failed contractor. The failed contractor shall be debarred from participating in the tender for executing the balance work. If the failed contractor is a partnership firm, then every member/partner of such partnership firm shall be debarred from participating in the tender for the balance work either in his/her individual capacity or as a partner of any other partnership firm.

DIRECTOR (O&S)
THARC, JAIPUR

Appendix 1

Current Equipment's of AFC system installed in JMRC

Location/Station	MSOR	NAMT	VKVR	SMNR	RMNR	CLJP	MRSN	SICP	CDPE	CTCP	BICP	220
Equipments	MS	NA	VK	SN	RN	0	Σ	S	0	0		
Central system												
(including KIMS,			EER									
DB(in redundancy										Day 3	m. I	each
mode), Application,	0	0	0	0	0	0	0	0	0	0	0	01 unit
AVM inquiry, Bank	U	U	· ·									01 unit
interface, Web & Web				1								
application,									-			MALE
Backup server, Tape library etc.)						100		111			0	1
NMS	0	0	0	0	0	0	0	0	0	0	0	1
Compact CC	0	0	0	0	0	0	0	0	0	0	. 0	1
BIM	0	0	0	0	0	0	0	0	0	0	0	2
CC Workstations	0	Q	0	0	0	0	0	0	0	0	0	10
Station Computer	1	1	1	1	3-1	1	1	1	1	1	1	0
Token Issuing Machine(TOM)	6	4	-4	4	4	4	6	4	6	6	6	0
Excess Fare Office(EFO)	2	2	2	2	2	2	2	2	2	2	2	0
Automatic Gate(AG) Entry	4	4	4	4	4	4	4	4	4	4	4	0
Automatic Gate(AG) Exit	4	4	4	4	4	4	4	4	5	6	6	0
Automatic Gate(AG) Bidirectional	2	2	2	2	2	2	2	2	.2	2	2	0
Ticket Vending Machine(TVM)	2	2	2	2	2	2	2	2	2	4	4	0
Add Value Machine(AVM)	4	4	4	4	4	4	4	4	4	4	4	. 0



APPENDIX - I-'A'

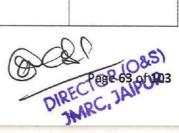
CHECK LIST OF DOCUMENTS TO BE SUBMITTED WITH THE TECHNICAL BID

(To be included in Bid Index and front of the technical proposal)

Name of the Bidder _		

S/N	Item	Bid Stipulations (if any)	Submission/ Compliance Requirement	Reference page No. in the Technical Submittal
1.0	Bid Document Cost Details, if application	able		
1.1	Bid Document Cost in the form of DD/BC	1.1.2.d of the NIB	Vertebrer	in exide
1.2	Name of Issuing Bank and Brach	11000		E Suite of
1.3	DD/BC No.		11-12-12-11-101	
1.4	DD/BC Date		- Valority	
1.5	Value of DD/BC		934 22.77	DOMESTICAL STREET
2.0(a)	Bid Security Details		and an analysis	nika m
2.1(a)	Bid Security in the form of DD/BC/BG	1.1.2 c of the NIB and 13 of the ITB	801 on	is quitanti parini
2.2(a)	Name of issuing Bank and Branch	the HD	100	
2.3(a)	DD/BC/BG No.			0.1-0.7
2.4(a)	DD/BC/BG Date			
2.5(a)	Value of DD/BC/BG	1		
2.0(b)	Processing Fee		ere en distriction	nW.strt - I
2.1(b)	Processing Fee in the form of DD/BC	1.1.2 e of the NIB	i partius	ng,2
2.2(b)	Name of Issuing Bank and Branch		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	en skylter i Tradition
2.3(b)	DD/BC No.			Lange Ale 1
2.4(b)	DD/BC Date			1 7
2.5(b)	Value of DD/BC			enate)
2.0(c)	Whether notarized Form-F on non- judicial stamp paper of Rs. 100 has been submitted	1.1.2 k of the NIB	To Tuesday	(III) Jeriotrik
3.0	Eligibility and Qualification of Bidde			a bearing as a
3.1	GST registration certificate	Clause 1.3 of Volume 1		The Edition
3.2	PAN certificate	Clause 1.3 of Volume 1	for Number of	
3.3	Registration certification of the firm / partnership deed / Certificate of incorporation. Etc.	Clause 1.3 of Volume 1	Lewissi 2 gallinger	ing-
3.4	Satisfactorily Work Completion report	Clause 1.3 of Volume 1		
3.5	Bid is from a Company	As per ITB Document	ON A	meta.
3.6	Whether power of Attorney with specimen signature has been submitted	As per ITB Document		

3.7	Bid is from JV / Consortium	Clause 9.0 of the (ITB)		
3.8	Whether notarized Power of Attorney	As per ITB		
	from each member of JV/Consortium is enclosed	Document		
3.9	Board Resolution of each of the			
	Consortium members authorizing	As per ITB		1
	execution of Consortium Agreement	Document		
	and appointing authorized signatory			
3.10	Memorandum of Agreement for	As per ITB	1	
	JV/Consortium	Document		
3.11	Details of percentage participation of	As per ITB		
	individual members specified in the	Document		
	MoA			
3.12	Whether registration with ROC	As per ITB		
	enclosed for a Bidder being a	Document		
	company/ each member in case of			
	JV/Consortium			= 5
	51,5515514411			
3.13	Whether registration with GST	As per ITB		
	department enclosed for a Bidder	Document		
	being a company/ each member in	Bocument		
	case of JV/Consortium			
3.14	Form of Bid-Form A	As per ITB		
0.11	Torm of Bid Torm A	Document		
3.15	Form of Bank Guarantee For Bid	As per ITB		
0.10	Security – Form B	Document		
3.16	FORMAT FOR AFFIDAVIT TO BE	As per ITB		
0.10	SUBMITTED BY TENDERER ALONG	Document		
	WITH THE TENDER DOCUMENT-	Document		
	Form F			
	Form			
3.17	Bidder's Profile-Form I	As per ITB		
3.17	Bluder's Frome-Point	Document		
3.18	Bidder's Authorization Certificate -	As per ITB		
5.10	Form J	Document		
3.19	Format of Power of Attorney –Form K	As per ITB		
0.15	romat of rower of Attorney -rom K	Document		
3.20	Bank Details- Form L	As per ITB		
3.20	Bank Details- Form L	Document		
3.21	FINANCIAL BID COVER LETTER &	As per ITB		
3.21	FORMAT COVER LETTER- Form N	Document		
2.00				
3.22	CERTIFICATE OF CONFORMITY/ NO	As per ITB		
2.02	DEVIATION- Form O	Document		
3.23	Black list Certificate – Form P	As per ITB		
2.04	Pinonsial Data Para W. I	Document		
3.24	Financial Data Form T - I	As per ITB	-	
		Document		
2.05	WI I I I I			
3.25	Whether copies of audited balance	1.3 e of the		
	sheets for last 3 audited financial	NIB		
	years have been submitted			



3.26	Contractual Experience record – Form T – II	As per ITB Document	
3.27	Whether self-attested copies of client's work order and works completion certificates as proof of experience have been submitted.		
3.28	INDEMNITY – Form T- V(A) & V(B)	As per ITB Document	
4.0	Technical Proposal		
4.1	Whether each page of Bid Document, Addendum (if any) and other submissions, enclosed duly numbered, signed & stamped, as a token of acceptance	As per ITB Document	
5.0	Whether scanned copy of Bid Security, Cost of Bid Form and processing Fee Documents/Instruments have been submitted online and original instruments submitted as per the schedule mentioned in the NIB	As per ITB Document	
6.0	Whether online Financial Bid/BOQ in prescribed format has been submitted.	As per ITB Document	

I/We have checked the above list with our submittal. The information submitted with the above documents is true & correct to the best of my/ our knowledge and belief. We are aware that if the Bid does not contain above documents or if the information contained in the above documents is found to be incorrect or suppressed, our bid is likely to be rejected by the Employer.

DIRECTOR (O&S)
JMRC, JAIPUR

(Authorized Signatory)

INDEX OF FORMS

1. PROFORMA OF FORMS - GENERAL

S. No.	Details	FORM		
i.	Form of Bid	A		
ii.	ii. Form of Bank Guarantee for Bid Security			
iii.	Form of Performance Security (Guarantee) by Bank	C		
iv.	Form of Agreement	D		
v.	Deleted	E		
vi	Format for Affidavit to be submitted by bidder/tenderer	F		
vii	Application	G		
viii	Consortium Agreement/Memorandum Of Agreement	Н		
ix	Bidder's Profile	I		
x	Bidder's Authorization Certificate	J		
xi	Format of Power of Attorney	K		
xii	Bank Details	L		
xiii	Deleted	M		
xiv	FINANCIAL BID COVER LETTER & FORMATCOVER LETTER	N		
XV	CERTIFICATE OF CONFORMITY/ NO DEVIATION	0		
xvi	Black list Certificate	P		

2. PROFORMA OF FORMS - TECHNICAL & FINANCIAL

S. No.	Details								
i.	Financial Data								
ii.	Contractual Experience Record								
iii.	Indemnity certificate and obligation/Compliance to be ensured by the Bidder								
iv.	Compliance with the code of integrity and no conflict of interest								
v.	Declaration by bidders regarding qualifications	T – VII							
vi.	Grievance Redressal during Procurement Process with Annexure	T – VIII							

DIRECTOR (O&S)
JAMPUR

FORM-A

FORM OF BID

Note: i. The Appendix and forms are part of the Bid

ii. Bidders are required to fill up all the blank space in this Form of Bid and Appendix.

Name of Work: "QR Ticketing Implementation in AFC System of Phase-1A & Phase-1B of Jaipur Metro Rail Corporation Ltd."

To

The Director (O&S), 4th Floor, Admin Building, Jaipur Metro Rail Corporation, Mansarovar Depot, Bhrigu Path, Jaipur-302020

Having visited the site and examined the General Conditions of Contract as well as Special Conditions of Contract, Specifications, Instructions to Bidders, for the execution of above named works, we the undersigned, offer to execute and complete such works and remedy defects therein in conformity with the said Conditions of Contract, Specifications, and Addenda.

OR such other sum as may be ascertained in accordance with the said conditions.

- We acknowledge that the Appendix forms an integral part of the Bid.
- We undertake, if our Bid is accepted, to commence the works within 7 days of issue of the Letter of Acceptance to complete the whole of the Works comprised in the Contract.
- 3. If our Bid is accepted, we will furnish at our option a Bank Guarantee for performance as security for the due performance of the Contract. The amount and form of such guarantee or bond will be in accordance with Clause 4.2 of the General Conditions of the Contract and as indicated in the Appendix.
- 4. We have independently considered the amount shown Clause 8.5 of the General Conditions of Contract as liquidated damages and agree that they represent a fair estimate of the damages likely to be suffered by you in the event of the work not being completed in time.
- 5. We agree to abide by this Bid for a minimum period of 90 days from the date fixed for receiving the same and it shall remain binding upon us and may be accepted at any time before the expiry of that period or any extended period mutually agreed to.
- Unless and until a formal Agreement is prepared and executed, this Bid, together with your written acceptance thereof, shall constitute a binding contract between us.
- 7. We declare that the submission of this Bid confirms that no agent, middleman or any intermediary has been, or will be engaged to provide ay services, or any other item or work related to the award and performance of this Contract. We further confirm and declare that no agency commission or any payment, which may be

DIRECTOR (O&S)

JMRC, JAIPUR

- construed as an agency commission has been, or will be, paid and that the Bid price does not include any such amount.
- 8. We acknowledge the right of the Employer, if he finds to the contrary, to declare our Bid to be non-compliant and if the Contract has been awarded to declare the Contract null and void.
- 9. We understand that you are not bound to accept the lowest or any Bid you may receive.
- 10. If our Bid is accepted we understand that we are to be held solely responsible for the due performance of the Contract.

Dated thisday of.		2024							
Signature									
Name		in		tl	ne			C	apacity
of	Duly	authorised	to	sign	Bids	for	and	on	behalf
of									
Address									
Witness - Signature									
Name									
Address									
Occupation			nara-senara	and the second second					

FORM-B PAGE 1 of 2

FORM OF BANK GUARANTEE FOR BID SECURITY

(Ref: Clause 13.0 of "instructions to Bidders")

1.	Kľ	WON	ALL	MEN	by	these presents that we			
	(N	ame of	Bank)	having	our re	egistered office at			
	Me	etro Ra fo	il Corp or whic	oration h payn	Limitenent w	ry) (hereinafter called "the Bank") are bound unto Jaipur ed (hereinafter called "the Employer") in the sum of Rs ill and truly to be made to the said Employer, the Bank and assigns by these presents.			
2.	AF Co	s subrect	nitted tem o	its Bid f Phas	dated e-1A &	for the "QR Ticketing Implementation in k Phase-1B of Jaipur Metro Rail Corporation Ltd." of of applicable Rail Corridor of Jaipur Metro called "the Bid".			
						is required to furnish a Bank Guarantee for the sum of s) as Bid Security against the Bidder's offer as aforesaid.			
						(Name and Address of the Bank) have, at the request this guarantee as hereinafter contained.			
3.	W	e furth	er agre	e as fol	lows:				
	a. That the Employer may without affecting this guarantee grant time or of indulgence to or negotiate further with the Bidder in regard to the condition contained in the said Bid and thereby modify these conditions or add thereto further conditions as may be mutually agreed upon between the Employer and Bidder.								
	b.					n before contained shall not be affected by any change in ink or in the constitution of the Bidder.			
	c.					between the Employer and the Bidder shall be conclusive e amount due hereunder and shall not be questioned by			
	d.	till		(Date 1		nmences from the date hereof and shall remain in force which Guarantee is valid i.e. 150 days from the last date of			
	e.	interp		n is r	epugna	Bidder' and 'the Bank' herein used shall, unless such an ant to the subject or context, include their respective			

FORM-B

PAGE 2 of 2

- 4. THE CONDITIONS OR THIS OBLIGATION ARE:
- a. If the Bidder withdraws his Bid during the period of Bid validity specified in the Form of Bid, or
- b. If the Bidder having been notified of the acceptance of his Bid by the Employer during the period of Bid validity:
- Fails or refuses to furnish the Performance security in accordance with clause 27.0 of the "Instructions to Bidders" and/or
- ii. Fails to commence the work as per terms And Conditions of Bid after issuance of LOA& letter to Commence.
- iii. Fails or refuses to enter into a Contract within the time limit specified in Clause 26.0 of the "Instructions to Bidders".

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

Signature of the Witness
Name of the Witness
Address of the Witness
Signature
Authorised Official of the Bank
Name of the Official
Designation
I.D. No.
V9.
Stamp/Seal of the Bank
33/3-2

DIRECTOR (O&S)

FORM-C PAGE 1 of 3

FORM OF PERFORMANCE SECURITY (GUARANTEE) BY BANK

(Refer Clause 27.0 of "Instructions to Bidders")

1.	This deed of guarantee made this day ofbetween Bank ofbetween Bank of (hereinafter called the "Bank") of the one part, and Jaipur Metro Rail
	Corporation Limited (hereinafter called "the Employer") of the other part.
2.	Whereas Jaipur Metro Rail Corporation Limited has awarded the contract for "QR Ticketing Implementation in AFC System of Phase-1A & Phase-1B of Jaipur Metro Rail Corporation Ltd." Contract for————————————————————————————————————
3.	AND WHEREAS the Bidder is bound by the said Contract to submit to the Employer a Performance Security for a total amount of Rs. (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
5.	After the Bidder has signed the aforementioned Contract with the Employer, the Bank is engaged to pay the Employer, any amount up to and inclusive of the aforementioned full amount upon written order from the Employer to indemnify the Employer for any liability of damage resulting from any defects or shortcomings of the Bidder or the debts he may have incurred to any parties involved in the Works under the Contract mentioned above, whether these defects or shortcomings or debts are actual or estimated or expected. The Bank will deliver the money required by the Employer immediately on demand without delay without reference to the Bidder and without the necessity of a previous notice or of judicial or administrative procedures and without it being necessary to prove to the Bank the liability or damage resulting from any defects or shortcomings or debts of the Bidder. The bank shall pay to the Employer any money so demanded notwithstanding any dispute/disputes raised by the Bidder in any suit or proceedings pending before any

FORM-C PAGE 2 of 2

- 6. This Guarantee is valid for a period of...... Months from the date of signing. (The initial period for which this Guarantee will be valid must be for at least six months longer than the anticipated expiry date of Contract period.
- 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 Bidder or if the Bidder 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 Bidder.
- 8. The guarantee hereinbefore contained shall not be affected by any change in the Constitution of the Bank or of the Bidder.
- 9. The neglect or forbearance of the Employer in enforcement of payment of any money, the payment whereof in 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.
- 10. The expressions "the Employer", "the Bank " and "the Bidder" hereinbefore used shall include their respective successors and assigns.

_ day of_____ (Month) 2024 beings herewith duly authorized.

In witness whereof I/We of the bank have signed and sealed this guarantee on the

For and on behalf of The	Bank
Signature of authorized bank off	icial
Name:	
Designation:	
I.D. No. :	
Stamp/Seal of the Bank:	
Signed, sealed and delivered	
For and on behalf of the Bank	
By the above named	_
In the presence of:	
Witness 1.	
Signature	
Name	

OIRECTOR TOUR MRP age 71 of 103

Address	
Witness 2.	
Signature	
Name	
Address	

Note:

 This should be executed on Rajasthan stamped paper in accordance with the Rajasthan stamp act 1998.

ONECTOR (O&S)
JMRC, JAIPUR

FORM-D PAGE 1 of 3

FORM OF AGREEMENT

(Refer Clause 26.0 of "Instructions to Bidders)

CONTRACT NO/NIB NO.: JMRC/O&S/S&T/NIB/2024-25/02

THIS AGRI	EEM	IENT ma	ade on	the day o	of	2024	between J	aipur Met	ro Rail
Corporation	n Li	mited, h	aving t	their registered	d office at	Registe	ered office:	Admin Bu	ailding,
Metro Dep		Bhrigu	Path,	Mansarovar,	Jaipur-30 shall,	02020	hereinafter	"JMRC"	which and
				——————————————————————————————————————					

hereinafter "Contractor",

WHEREAS the Contractor has offered a Bid for "QR Ticketing Implementation in AFC System of Phase-1A & Phase-1B of Jaipur Metro Rail Corporation Ltd." and agrees to undertake performance of such services under the terms and conditions set forth in this Contract.

Both parties hereby agree as follows:

- 1. In this Agreement words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.
- The following documents shall be deemed to form and be read and construed as part of this Agreement, viz:
 - (a) Letter of acceptance& letter of commencement.
 - (b) General conditions of Contract
 - (c) Special Conditions of Contract
 - (d) Special Specifications
 - (e) Notice Inviting Bid
 - (f) Bill of Quantities
 - (g) Form of Bid with Appendix
 - (h) Addendums, if any
 - (i) Other conditions agreed to and documented as listed below:
 - a) Bidder's Work Schedule as amended if required
 - b) (ii) Statement of deviations (if applicable)
 - c) (iii) Any other item as applicable

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

DIRECTOR TORS

FORM-D PAGE 2 of 3

Clause 2 Obligation of the Contractor:

The Contractor agrees, subject to the terms and conditions of the Contract Documents to perform efficiently and faithfully all of the for "QR Ticketing Implementation in AFC System of Phase-1A & Phase-1B of Jaipur Metro Rail Corporation Ltd." and in carrying out all duties and obligations imposed by the Contract Documents. The Contractor agrees to pay the amount and penalty specified, if any, to the JMRC at the rates and terms and in the manner set forth in the Contract Documents.

Clause 3 Obligation of the JMRC:

The JMRC agrees, subject to the terms and conditions of the Contract Documents, to provide unobstructed access wherever it is required for providing the Services as per the Scope of Work and terms and in the manner set forth in the Contract Documents.

Clause 4 Contract Price:

The JMRC / Contractor (as applicable) agrees to pay for the services under the Scope of this contract and the Contractor / JMRC (as applicable) agrees to accept the sums mentioned below, as part of his obligations, responsibilities and liabilities under and according to the provisions and obligations imposed on him by the Contract.

Clause 5 Notices:

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

JMRC:-
То
Director (O&S),
Jaipur Metro Rail Corporation Limited,
4th Floor, Admin Building,
Mansarovar Metro Depot,
Bhrigu Path, Mansarovar, Jaipur-302020

CONTRACTOR:-	
-	

Clause 6 Obligation of tax law

Both the parties shall ensure full compliance with tax laws of India with regard to this contract and shall be responsible for the same. Either party shall keep the other party fully indemnified against his liability of tax, interest, penalty, etc. in respect thereof which may arise.

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FORM-D PAGE 3 of 3

Clause 7 Integration

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

Clause 8 Governing Law

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

Clause 9 Language

This Contract Agreement and the other Contract Documents are made in the English language.

Clause 10 Jurisdiction of court

All claims, matters and disputes are subject to the exclusive jurisdiction of the Competent Courts in Jaipur only.

In WITNESS THEREOF, The parties have caused this Contract to be signed in their respective names as of the day and year first written above.

The contractor
()
WITNESS

Note:

 This should be executed on Rajasthan stamped paper in accordance with the Rajasthan stamp act 1998.

(4.0) 9010 710 19140 JAH

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DIRECTOR (O&S)

Form-F

FORMAT FOR AFFIDAVIT TO BE SUBMITTED BY TENDERER ALONG WITH THE TENDER DOCUMENT

(To be executed in presence of Public notary on non-judicial stamp paper of the value of Rs.100/-.The stamp paper has to be in the name of the tenderer)**

- 1. I/We the tenderer(s) am/are signing this document after carefully reading the contents.
- I/We the tenderer(s) also accept all the conditions of the tender and have signed all the pages in confirmation thereof.
- 3. I/We hereby declare that I/We have downloaded the tender document from Jaipur Metro website www.transport.rajasthan.gov.in/jmrc and printed the same. I/we have verified the contents of the printed document from the website and there is no addition, or deletion or no alteration to the contents of the tender document in case of any discrepancy noticed at the stage i.e.,; evaluation of tenders, execution of work or final payment of the contract, the master copy available with the JMRC administration shall be final and binding upon me/us.
- I/we declare and certify that I/We have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements.
- I/we also understand that my/our offer will be evaluated based on the documents/credentials submitted along with the offer and same shall be binding upon me/us.
- I/we declare that the information and documents submitted along with the tender by me/us are correct and I/we are fully responsible for the correctness of the information and documents submitted by us.
- 7. I/we also understand that if any of the certificates submitted by us are found to be false/forged or incorrect at any time the award of the contract, it will lead to termination of the contract, along with forfeiture of EMD/SD and Performance guarantee besides any other action provided in the contract.

DIRECTOR (O&S)

JMRC, JAIPUR

DEPONENT

SEAL AND SIGNATURE OF THE TENDERER

VERIFICATION:

I/we above named tenderer do hereby solemnly affirm and verify that the contents of my above affidavit are true and correct. Nothing has been concealed and no part of it is false.

DEPONENT

SEAL AND SIGNATUREOF THE TENDERER

Place:

Date:

**The contents in italics are only for guidance purpose. Details as appropriate are to be fill-in suitably by tenderer. Attestation before Magistrate/ Notary Public.

FORM-G

Application

[On Company's Letter Head (each member in case of Consortium)]

To
The Director (O&S)
4th Floor, Admin Building,
Jaipur Metro Rail Corporation,
Mansarovar Depot,
Bhrigu Path, Jaipur-302020

Sub: -"QR Ticketing Implementation in AFC System of Phase-1A & Phase-1B of Jaipur Metro Rail Corporation Ltd." NIB NO.:- JMRC/O&S/S&T/NIB/2024-25/02

Dear Sir,

- 1.0 We wish to confirm that our company/firm (delete as appropriate) has formed/intends (delete as appropriate) to form a consortium with ______ (member to insert names of all other members of the consortium) for the purpose associated with the Bid.
- 2.0 We understand that in the event of any information furnished by us found, even at a later date, to be incorrect or any material information having been suppressed, JMRC may take appropriate action as under: -
- Our name may be removed from the list of shortlisted Bidders at any time during the Bid process or after award of the contract.
- ii) Any Bid submitted by us on the basis of short-listing may not be considered.
- iii) If any Bid from us is accepted and a contract awarded to us on the basis of our short listing, the Bid acceptance may be withdrawn and the contract awarded to us cancelled without any financial claim / Arbitration request from our side.

[Member(s) who are not the lead member of the consortium should add the following paragraph]

3.0 The consortium is led by ______ (member to insert name of lead member) whom we hereby authorize to act on our behalf for the purposes of applying for this Bid.

[Member who is the lead member of the consortium should add the following paragraph]

4.0 In this consortium we act as lead member and for the purposes of applying for the NIB No. JMRC/O&S/S&T/NIB/2024-25/02, represent the consortium.

DIRECTOR (O&S)

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- 5.0 In the event of our consortium is awarded the Contract we agree that we will be jointly (with other members of our consortium) and severally liable to Jaipur Metro Rail Corporation Limited. (JMRC), its successors and assigns for all obligations, duties and responsibilities arising from or imposed by any contract subsequently entered into between JMRC and our consortium.
- 6.0 Equity shareholding of constituent members of the consortium is as under -

S/N	Consortium Member Name	Equity Stake (%) in the Consortium	Role of the Member in the Consortium (whether Lead Member/Member)
1			
2			
3			

Yours laithfully,		
Signature of Authorized Signatory		
Name of Authorized Signatory		

FORM-H

CONSORTIUM AGREEMENT/MEMORANDUM OF AGREEMENT

This Consortium Agreement/Memorandum of Agreement is executed at Jaipur on this day of, 2024.
BETWEEN / AMONG
M/s, Individual / Firm / Company incorporated under the Companies Act, 1956 and having its Office at [acting through its duly authorized by a resolution of the Board of Directors dated] (hereinafter referred to as the 'LEAD MEMBER' which expression unless excluded by or repugnant to the subject or context be deemed to mean and include its successors in interest, legal representatives, administrators, nominees and assigns) of the ONE Part;
AND
M/s, Individual / Firm / Company incorporated under the Companies Act, 1956 and having its Office at [acting through its duly authorized by a resolution of the Board of Directors dated] (hereinafter referred to as the ('Participant member') which expression unless excluded by or repugnant to the subject or context be deemed to mean and include its successors in interest, legal representatives, administrators, nominees and assigns) of the OTHER/SECOND PART
[AND
M/s, Individual / Firm / Company incorporated under the Companies Act, 1956 and having its Office at [acting through its duly authorized by a resolution of the Board of Directors dated] (hereinafter referred to as the ('Participant member') which expression unless excluded by or repugnant to the subject or context be deemed to mean and include its successors in interest, legal representatives, administrators, nominees and assigns) of the third PART]
Whereas Jaipur Metro Rail Corporation Limited (hereinafter referred to as 'JMRC') has invited NIB No.JMRC/O&S/S&T/NIB/2024-25/02 for "QR Ticketing Implementation in AFC System of Phase-1A & Phase-1B of Jaipur Metro Rail Corporation Ltd." AND WHEREAS the parties hereto have discussed and agreed to form a Consortium for participating in the aforesaid application and have decided to deduce the agreed terms in writing. Now This Consortium Agreement/Memorandum of Agreement Hereby Witnesses:
 That in the premises contained herein, the Lead Member and the Participant Member(s) having decided to pool their technical know-how, working experiences

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	and finar	ncial resources, have form C's bid.	ned themselves in	to a Consortium to par	ticipate in
2.		members of the Consortion abide by and be bound d.			
3.		e Consortium has agre			
	and purp	tative who shall be authorouses for dealing with JMIs and things necessary for	RC and for submi	tting the bid as well as	
4.		share holding of the mem as follows:	abers of the Cons	ortium for this specifie	d purpose
		The Lead Member nolding with reference to the			of share
		he Participant Member _ olding with reference to the			share
		The Participant Member _ holding with reference to the			
5.	separate l to provide share hol	rder to fulfill the requirem legal entity of the Consor e their own nominees as lding for the purpose of which the Consortium pro-	tium, the Membe s share holders t formation of a S	rs of the Consortium to the extent of their special Purpose Compa	indertake respective
6.	becomes members	ase to meet the requirem necessary to execute a of the Consortium, they for the purpose of the said	nd record any undertake to do t	other documents amo	ongst the
7.	this Cons Consortium provisions shall other activities	clarified by and between sortium Agreement/Memory and does not constitute of the Indian Partnersh erwise be free to carry for their own respective is Consortium Agreement	orandum of Agre any type of pa ip Act and that t on their indepe benefits under t	ement by the member rtnership for the purche members of the Co ndent business or co heir own respective na	rs of the rposes of ensortium mmercial ames and
8.	responsibi and the sa Association	Members of the Consortius ilities for the purposes of aid project if awarded to the normal of the proposed Special of the members to meet the results.	f implementation he Consortium ir l Purpose Compa	of this Consortium A the Memorandum & A ny to be got incorporat	greement Articles of
		TESTIMONY WHEREOF T THE DATE, MONTH AND			
	1. ()		De la company de	
Signat	ure of Agenc	cy (Authorised Signatory)		TOR LOASPAR	e 81 of 103
		(4)		ORECTOR (O&SPAR DIRECTOR JAIPUR	8

	Authorized S	Signatory
	()
	For (Name of	f company)
2.	()
	Authorized S	Signatory
	()
	For (Name of	company)
3.	()
	Authorized Si	ignatory
	()
	For (Name of	company

Enclosure: Board resolution of each of the Consortium Members authorizing:

- (i) Execution of the Consortium Agreement, and
- (ii) Appointing the authorized signatory for such purpose.

DIRECTOR (O&S)
JMRC, JAIPUR

FORM-I

BIDDER'S PROFILE

1.	Name & Address of The Bidder	
2.	Location of Corporate Head Quarters	
3.	Details of Contact person (Name, designation, address etc.) Telephone Number, Fax Number, e-mail	
4.	Is the firm a registered company? If yes, submit documentary proof. Year and Place of the establishment of the Company	
5.	Is the firm registered with sales tax department? If Yes, submit valid sales tax registration certificate.	*
6.	Number of offices in Rajasthan and in India	and the second second
7.	Authorized Signatory	
8.	GSTIN Number with enclosed certificate	
9.	PAN Details with copy of PAN Card	
10.	Details of court litigations, including (but not limited to) – Have you filed any claim against any Company / Institutions /PSU/JMRC for such type of project? If so, give details like case no., court dispute involved and present status. Has any Company/ Institution / PSU/JMRC filed any claim/case against you, if so, furnish full details. Has any of your customer or clients filed any case against you in a court? If so, furnish details.	



FORM-J

Bidder's Authorization Certificate (to be filled by the BIDDERS)

To,

The Director (O&S), 4th Floor, Admin Building, Jaipur Metro Rail Corporation, Mansarovar Depot, Bhrigu Path, Jaipur-302020

I/ We {Name/ Designation} hereby declare/ certify that {Name/ Designation} is hereby authorized to sign relevant documents on behalf of the company/ firm in dealing with NIB reference No.JMRC/O&S/S&T/NIB/2024-25/02. He/ She is also authorized to attend meetings & submit technical & commercial information/ clarifications as may be required by you in the course of processing the Bid. For the purpose of validation, his/ her verified signatures are as under.

Name of the Bidder: Verified Signature:
Authorized Signatory: Seal of the Organization: Date:
Place:

Thanking you,

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DIRECTOR (O&S)

JMRC, JAIPUR

FORM-K

FORMAT OF POWER OF ATTORNEY

Know all men by these presents, we,
(Name of the Bidder firm), having our registered office
at do hereby
irrevocably constitute, nominate, appoint and authorize
Mr./Ms son / daughter o
Shriand
presently residing at, who is
presently employed with us and holding the position o
, as our true and
lawful attorney (hereinafter referred to as the "Attorney") to do in our name and or
our behalf, all such acts, deeds and things as are necessary or required in
connection with or incidental to submission of our Bid for "QR Ticketing Implementation in AFC System of Phase-1A & Phase-1B of Jaipur Metro Rai
Corporation Ltd." (JMRC/O&S/S&T/NIB/2024-25/02) including but not limited to
signing and submission of all applications, Bids and other documents and
writings, participate in Bidders and other conferences and providing information
responses to the Authority, representing us in all matters before the Authority
signing and execution of all contracts including the Contract Agreement
and undertakings consequent to acceptance of our Bid, and generally dealing
with the Authority in all matters in connection with or relating to or arising out of
our Bid for the said Project and/or upon award thereof to us and/or till the
entering into of the Contract Agreement with the Authority.
AND we hereby agree to ratify and confirm and do hereby ratify and confirm al
acts, deeds and things done or caused to be done by our said Attorney pursuant
to and in exercise of the powers conferred by this Power of Attorney and that all
acts, deeds and things done by our said Attorney in exercise of the powers hereby
conferred shall and shall always be deemed to have been done by us.
IN WITNESS WHEREOF WE, THE
ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON
THIS DAY OF 2024.
For
(Signature, Name, Designation and Address)
Accepted
Signature, Name, Designation and Address of Attorney)
Witnesses:
1
2
1

Note:

- 3. The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, lay down by the applicable law and the charter documents of the executants(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
- 4. This should be executed on non-judicial stamped paper of Rs. 100 stamped in accordance with the stamp act.

DIRECTOR (O&S)

MARC, JAIPUR

FORM-L

BANK DETAILS

Beneficiary Name:

Beneficiary Address:

Line 1	
Line 2	
District/ City	State UT
Pin Code	Tele/Fax
Mobile Alert	
1	
2	

Bank Details:

Bank Name	
Branch Address	
Beneficiary A/C No:	
Beneficiary A/C Type:	Saving/ Current
Beneficiary A/C Name:	
9 Digit Branch MICR Code:	
IFSC Code of Branch:	

Stamp & Signature of Authorize Authorized Signatory of Bidder.

Stamp & Signature of Signatory of bank.

DIRECTOR (O&S)

AIPUR

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FORM-N

FINANCIAL BID COVER LETTER & FORMAT COVER LETTER (to be submitted by the bidder on his Letter head)

To,
The Director (O&S),
4thFloor, Admin Building,
Jaipur Metro Rail Corporation,
Mansarovar Depot,
Bhrigu Path, Jaipur-302020

Reference: NIB No.:- JMRC/O&S/S&T/NIB/2024-25/02

Dear Sir,

We, the undersigned bidder, Having read & examined in detail, the Bidding Document, the receipt of which is hereby duly acknowledged, I/we, the undersigned, offer to supply/ work as mentioned in the Scope of the work, Bill of Material, Technical specifications, Service Level Standards & in conformity with the said bidding document for the same.

I/ We undertake that the prices are in conformity with the specifications prescribed. The quote/price are inclusive of all cost likely to be incurred for executing this work. The prices are inclusive of all type of govt. taxes/duties as mentioned in the financial bid (BOQ).

I/We undertake, if our bid is accepted, to deliver the goods in accordance with the delivery schedule specified in the schedule of Requirements.

I/We undertake to successfully operationalize the entire solution as per scope of work mentioned in the RFP document.

I/We hereby declare that in case the contract is awarded to us, we shall submit the contract performance guarantee as prescribed in the bidding document.

I/ We agree to abide by this bid for a period of_____ days after the last date fixed for bid submission and it shall remain binding upon us and may be accepted at any time before the expiry of that period.

Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your notification of award shall constitute a binding Contract between us.

I/We hereby declare that our bid is made in good faith, without collusion or fraud and the information contained in the bid is true and correct to the best of our knowledge and belief. We understand that you are not bound to accept the lowest or any bid you may receive

We agree to all the terms & conditions as mentioned in the bidding document and submit that we have not submitted any deviations in this regard.

Date:

Authorized Signatory

Name:

Designation:

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FORM-O

CERTIFICATE OF CONFORMITY/ NO DEVIATION (to be filled by the bidder)

To,
The Director (O&S),
4th Floor, Admin Building,
Jaipur Metro Rail Corporation,
Mansarovar Depot,
Bhrigu Path, Jaipur-302020

CERTIFICATE

This is to certify that, the specifications of Hardware & Software which I/ We have mentioned in the Technical bid and which 1/ We shall supply if I/ We am/ are awarded with the work, are in conformity with the minimum specifications of the bidding document and that there are no deviations of any kind from the requirement specifications.

Also, I/we have thoroughly read the bidding document and by signing this certificate, we hereby submit our token of unconditional acceptance to all the terms & conditions of the bidding document without any deviations.

I/We also certify that the price / we have quoted is inclusive of all the cost factors involved in the end-to-end implementation and execution of the project, to meet the desired Standards set out in the bidding Document.

Thanking you,

Name of the Bidder:
Authorised Signatory:

Seal of the Organization:-

Date:

Place:

DIRECTOR (O&S)

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FORM-P

BLACK LIST CERTIFICATE (to be filled by the bidder)

To,
The Director (O&S),
4th Floor, Admin Building,
Jaipur Metro Rail Corporation,
Mansarovar Depot,
Bhrigu Path, Jaipur-302020

CERTIFICATE

Date

We certify that our organisation has neither been black listed nor our contracts have been terminated/ foreclosed by any company / government department / public sector organisation during last 3 financial years ending 31.03.2024 and during current financial year till date of bid submission, due to non-fulfilment of contractual obligations.

Place Name

Designation

Seal of Authorised Signatory

Signature

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DIRECTOR (O&S)

JMRC, JAIPUR

FORM T-I

FINANCIAL DATA

[Refer Clause 1.3 (e) of NIB]

Average Annual Turnover during the period 2021-22, 2022-23 and 2023-24

(To be executed on company letter head-self attested and notarized)

	S. No	Description	Year 2021-2022 (Rs. in Crore)	Year 2022-2023 (Rs. in Crore)	Year 2023-2024 (Rs. in Crore)	
	1	2	3	4	5	
	1	Total turnover (Rs. in Crore)				
	2	Average Annual Turnover (Rs. in Crore)				
[Note:	Turno	ver for the fina	ncial year 2023-	24 can be conside	1641	
respec	ctive y	ears as a proof	Chartered According of document.	ountant or attace In any case three	h Balance Shee	t for
respec years	ctive y turnov	ears as a proof er will be consid	Chartered According to document. I	ountant or attac	h Balance Shee consecutive fina	t for
respec years Regist	ctive y turnov ration	ears as a proof er will be consid	Chartered According to document. I	ountant or attac	h Balance Shee consecutive fina	t for ancia
respective years Registration here	tive y turnov ration	rears as a proof rer will be consider No. Of Constitution	Chartered According to document. I	ountant or attace In any case three ountant/Firm s	h Balance Shee consecutive fina	et for ancial
respective years Registrate here Date Audito Charte	tive y turnov ration r/seal	rears as a proof ver will be consider. No. Of Consider.	Chartered According of document. Idered] Chartered According to Accord	ountant or attace In any case three ountant/Firm s Bidder (Nam	th Balance Sheet consecutive final hall be ment Signature	et for ancial

DIRECTOR (O&S)
DIRECTOR (O&S)
JAMPUR

FORM T-II

CONTRACTUAL EXPERIENCE RECORD

(Refer Clause 1.3 (d)of NIB)

1. Total number of years of experience in successfully completed one project of Supply, Installation, Testing & commissioning of AFC system or Up gradation of AFC system for QR Based ticketing system for MRTS/Bus in Railways, Metros/ Government Ministries/ Departments/ PSUs/Private Ltd.

Details of contractual experience in completion in the field of Supply, Installation, Testing & commissioning of AFC system or Up gradation of AFC system for QR Based

S. No.	Date of Supply, Installation, Testing & commissioni ng/Up gradation	Date of completion of contract (including time extension)	Order No. & Date	Details of work handled	Work order of Value in INR	Amount of Work Executed
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		=				
		- % =				
	= 1	= =				

Notes:

- (a) Details shall be submitted in above Performa only.
- (b) The details of work including the cost of the work and date of completion etc. should be supported by self attested copies of each client's work completion certificates issued by the officer not below the rank of Executive Engineer or equivalent in case of central/state Govt. and PSU's.
- (c) Additional pages may be attached if required.
- (d) All the pages must be signed by the authorized signatory of the Bidder.



FORM-T-V (A)

INDEMNITY

(To be filled by Bidder)

I on	behalf of M/snereby agree and undertake that:
i)	I have understood all the safety rules and procedures and all staff working on behalf of M/swill abide by all safety rules and procedures.
ii)	I declare that M/swill be responsible for any safety violation/accident etc. and Jaipur Metro Rail Corporation will not be responsible in case of any accident and will not compensate my staff financially or otherwise.
iii)	I declare that M/s
I M/s	hereby declare that I am authorized person on behalf of
Nam	ne of Indemnifier Signature of Indemnifier
	Stamp/seal of the Indemnifier / Bidder

DIRECTOR (O&S)

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FORM-T-V (B)

INDEMNITY

(To be filled by Bidder staff individually)

I,		hereby agree and undertake that:
i)	I have understood all the safet rules and procedures.	ty rules and procedures and I will abide by all safety
ii)	responsibility and liability rega	ployer M/s shall bear all arding all types of claims raised by me and I will not employment whatsoever from Jaipur Metro Rail
		8
Name	e of Indemnifier	Signature of Indemnifier
NAM:	E OF BIDDER	SIGNATURE OF BIDDER

DIRECTOR (O&S)

Form-T-VI

(Refer clause 29.0 of ITB)

Compliance with the Code of Integrity and No Conflict of interest

I, on behalf of M/s. declare that I have understood and submit my compliance to the following provisions of RTPPR, 2013

"Any person participating in a procurement process shall -

- (a) Not offer any bribe, reward or gift or any material benefit either directly or indirectly in
 - Exchange for an unfair advantage in procurement process or to otherwise influence the procurement process;
- (b) Not misrepresent or omit that misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
- (c) Not indulge in any collusion, Bid rigging or anti-competitive behaviour to impair the transparency, fairness and progress of the procurement process;
- (d) Not misuse any information shared between the procuring Entity and the Bidders with intent to gain unfair advantage in the procurement process;
- (e) Not indulge in any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
- (f) Not obstruct any investigation or audit of a procurement process;
- (g) Disclose conflict of interest, if any; and
- (h) Disclose any previous transgressions with any Entry in India or any other country during the last three years or any debarment by any other procuring entity.

Conflict of interest:-

The Bidder participating in a bidding process must not have a Conflict of Interest. A Conflict of Interest is considered to be a situation in which a party has interests that could improperly influence that party's performance of official duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations.

A Bidder may be considered to be in Conflict of Interest with one or more parties in a bidding process if, including but not limited to:

- a) Have controlling partners/ shareholders in common; or
- b) Receive or have received any direct or indirect subsidy from any of them; or
- c) Have same legal representative for purposes of the Bid; or
- d) Have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of

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- another Bidder, or influence the decisions of the procuring Entity regarding the bidding process; or
- e) The Bidder participates in more than one Bid in a bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which the Bidder is involved. However, this does not limit the inclusion of the same sub Bidder, not otherwise participating as a Bidder, in more than one Bid; or
- f) The Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the Goods, Works or Services that are the subject of the Bid; or
- g) Bidder or any of its affiliates has been hired (or is proposed to be hired) by the procuring Entity as engineer-in-charge/ consultant for the contract."

Date:

Signature of bidder

Place: Name:

Designation:

Address:

DIRECTOR (O&S)

JMRC, JAIPUR

Form-T-VII

Declaration by the Bidder regarding Qualifications

Declaration by the Bidder

In	relation	to	my/	our	Bid	submi	itted	to			for
pro	curement	C	of	in	res	ponse	to	their	Notice	Inviting	Bids
No.									Dated	I/we	hereby
dec	lares unde	r Se	ction	7 of	f Rajas	sthan T	ranspa	arency in	Public Proc	urement Ac	t, 2012,
tha							_				

- 1. I/we possess 1 the necessary professional, technical, financial and managerial resources and competence required by the Bidding Document issued by the Procuring Entity;
- 2. I/we have fulfilled my/our obligation to pay such of the taxes payable to the Union and the State Government or any local authority as specified in the Bidding Document:
- 3. I/we are not insolvent, in receivership, bankrupt or being wound up, not have my/our affairs administered by a court or a judicial officer, not have my/our business activities suspended and not the subject of legal proceedings for any of the foregoing reasons;
- 4. I/we do not have, and our directors and officers not have, been convicted of any criminal offence related to my/our professional conduct or the making of false statements or misrepresentations as to my/our qualifications to enter into a procurement contract within a period of three preceding the commencement of this procurement process, or not have been otherwise disqualified pursuant to debarment proceedings;
- 5. I/we do not have a conflict of interest as specified in the Act, Rules and the Bidding Document, which materially affects fair competition;

Date:

Signature of bidder

Place:

Name:

Designation:

Address:

DIRECTOR TORST Page 97 of 103

Form-T-VIII

(Refer clause 30.0of ITB)

Grievance/ Redressal during Procurement Process

The designation and address of the First Appellate Authority is Managing Director, Jaipur Metro Rail Corporation, Jaipur.

The designation and address of the Second Appellate Authority is Principal Secretary, UDH, GoR, Jaipur.

Filing an appeal

If any Bidder or prospective bidder is aggrieved that any decision, action or omission of the Procuring Entity is in contravention to the provisions of the Act or the Rules or the Guidelines issues there under, he may file an appeal to First Appellate Authority, as specified in the Bidding Document within a period of ten days from the date of such decision or action, omission, as the case may be, clearly giving the specific ground or grounds on which he feels aggrieved:

Provided that after the declaration of a Bidder as successful the appeal may be filed only by a Bidder who has participated in procurement proceedings:

Provided further that in case a Procuring Entity evaluates the Technical Bids before the opening of the Financial Bids, an appeal related to the matter of Financial Bids may be filed only by a Bidder whose Technical Bid is found to be acceptable.

- (1) The officer to whom an appeal is filed under Para (I) shall deal with the appeal as expeditiously as possible and shall endeavour to dispose it or within thirty days from the date of the appeal.
- (2) If the office designated under Para(1) fails to dispose of the appeal filed within the period specified in Para(2), or if the Bidder or prospective bidder or the Procuring Entity is aggrieved by the order passed by the First Appellate Authority, the Bidder or prospective bidder or the Procuring Entity, as the case may be, may file a second appeal to Second Appellate Authority specified in the Bidding Document in this behalf within fifteen days from the expiry of the period specified in Para(2) or of the date of receipt of the order passed by the First Appellate Authority, as the case may be.

(3) Appeal not to Be in certain cases

No appeal shall lie against any decision of the Procuring Entity relating to the following matters, namely:-

- (a) Determination of need of procurement;
- (b) Provisions limiting participation of Bidders in the Bid process;
- (c) The decision of whether or not to enter into negotiations;
- (d) Cancellation of a procurement process;
- (e) Applicability of the provisions of confidentiality

DIRECTOR (O&S)

MARC, JAIPUR

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(4) Form of Appeal

- (a) An appeal under Para (I) or (3) above shall be in the annexed Form along with as many copies as there are respondents in the appeal.
- (b) Every appeal shall be accompanied by an order appealed against, if any, affidavit verifying the facts stated in the appeal and proof of payment of fee.
- (c) Every appeal may be presented to First Appellate Authority or Second Appellate Authority, as the case may be, in person or through registered post or authorised representative.

(5) Fee for filing appeal

- (a) Fee for first appeal shall be rupees two thousand five hundred and for second' appeal shall be rupees ten thousand, which shall be non-refundable.
- (b) The fee shall be paid in the form of bank demand draft or banker's cheque of a Scheduled Bank in India payable in the name of Appellate Authority concerned.

(6) Procedure for disposal of appeal

- (a) The First Appellate Authority or Second Appellate Authority, as the case may be, upon filing of appeal, shall issue notice accompanied by copy of appeal, affidavit and documents, if any, to the respondents and fix date of hearing.
- (b) On the date fixed for hearing, the First Appellate Authority or Second Appellate Authority, as the case may be, shall,-
 - (i) Hear all the parties to appeal present before him; and
 - (ii) Peruse or inspect documents, relevant records or copies thereof relating to the matter.
- (c) After hearing the parties, perusal or inspection of documents and relevant records or copies thereof relating to the matter, the Appellate Authority concerned shall pass an order in writing and provide the copy of order to the parties to appeal free of cost.
- (d) The order passed under sub-clause (c) above shall also be placed on the State Public Procurement Portal.

Date:

Signature of bidder

Place:

Name:

Designation:

Address:

CIRECTOR (O&S)

CIRECTOR (O&S)

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Annexure to FORM-T-VIII

(Refer clause 30.0of ITB)

Memo	orandum of Appeal under the Rajasthan Transparency in Public Procurement 2012
1.00	d Appellate Authority) (First /
1. (i) (ii) (iii)	Particulars of appellant; Name of the appellant Official address, if any: Residential address:
2.	Name and address of the respondent
(i) (ii) (iii)	
3.	Number and date of the order appealed against and name and designation of the officer / authority who passed the order (enclose copy), or a statement of a decision, action or omission of the Procuring Entity in contravention to the provisions of the Act by which the appellant is aggrieved:
4.	If the Appellant proposes to be represented by a representative, the name and postal address of the representative:
5.	Number of affidavits and documents enclosed with the appeal:
6.	Grounds of appeal:
	(Supported by an affidavit).
	Prayer
	······································
Place	
Date Appel	lant's Signature

DIRECTOR (O&S)
JMRC, JAIPUR

VOLUME-2

(General Conditions of Contract (G.C.C.)

GCC (Available on JMRC official website under the head 'Tenders')

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VOLUME-3

(Bill of Quantities)

Total State | Popularies | State | Sta

BILL OF QUANTITIES (BOQ) -FINANCIAL BID FORM

The above image is for reference purpose. Actual BOQ is available at https://eproc.rajasthan.gov.in

Note:

- a. Rate quoted should be all inclusive for carrying out all activities as detailed in the scope of work and will be deemed to include all incidental charges, remittance, supervision, transport, contractor's profit and establishment/overheads, all risks and other obligations set out or implied in the contract, complete as required excluding GST which is being considered in BOQ separately. The effective rate of GST will be reckoned on the base of material supplied date to JMRC.
- b. Advance Payment will not be made. The payment based on BOQ would be payable after completion of work and invoice generate by contractor.
- c. The Criteria of evaluation shall be suitable L1 for the Total rate quoted in BOQ.
- d. Bidder must quote for all the items mentioned in the BOQ (Bill of Quantities). In case, a Bidder does not quote for any item, the bid shall be summarily rejected.

Signature of firm's representative (With seal of firm)

DIRECTOR (O&S) Page 103 of 103

MRC, JAIPUR