

PART-1: SECTION- II: BID DATA SHEET**1. Replace Clause No. ITB 11.1 (c) with**

The Bidder shall, on or before the date and time given in the Notice of Invitation to Bid, upload his Bid on e-tendering portal <https://mahametrorail.etenders.in> in accordance with provisions in ITB 22.1.

The Bidder shall, on or before the date given in NIT, submit his Bid online and follow the procedure and steps of E-Tender portal of MAHA-METRO. Details have been given in E-Toolkit given in Annexure-II-A

Cost of the bid document: INR 35,400/- Paid online through E-Tender portal

Bid Security: – INR 608,000/- (Six Hundred & Eight Thousand Only) in the form of Bank Guarantee issued from a Scheduled Commercial Bank of Indian & Foreign origin having business office in India

Technical Package: To be submitted at appropriate place i.e. Technical Section on e-tenderportal.

Financial Package: Financial bid form to be duly filled up directly in the Commercial Section on e-tender portal and nowhere else.

- Bidder should ensure that none of the part of Financial Bid should be uploaded in anywhere in the technical section, if the bidder does so then his bid will be rejected out rightly.
- The scanned copy of EMD (BG) shall be uploaded by bidder in Technical Section of E-tender portal. The original required to be submitted in Physical Form at Procurement Department of MAHA-Metro within 3 working days from the final date of closing of online bid.

For Bid Security: refer [BDS ITB 19.1](#) below

2. Replace Clause No. ITB 33.1 with

Refer to ITB 1.5 of Part-1: Section-II Bid Data Sheet

PART-1: SECTION- III: QUALIFICATION & EVALUATION CRITERIA**3. 3a. Replace Clause No. 3.1 with**

The Bidder shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow requirements estimated as **INR 13.5 million** for the subject contract (s) net of the Bidder's other commitments.

3b. Replace Clause No. 3.2 with

Minimum average annual turnover of INR 97 million equivalent calculated as total certified payments received for contracts of similar works as defined in Notes 1 in progress and/or completed within the **last 3 (Three)** years

Note:

1. Last Three years shall be 2015-16 to 2017-18. In case of Companies, which follows Financial Year as Calendar Year (January to December), data for the year 2017 shall be treated equivalent to the data of FY 2017-18 and so on.

3c. Replace Clause No. 4.2 (a) with

A minimum number of **Similar Works***** specified in Note 1 that have been satisfactorily and completed as a prime contractor, joint venture member³ carried out by tenderer during last 5 **(Five) years, preceding June-2018**, in Government, Semi-Govt. & Govt. undertaking Organizations /PSUs/Govt. Owned Institution, Private Corporate listed in NSE, BSE (India)

Should have received not less than **INR 97 Million** for **Similar Works***** in One Completed Contract Work

OR

Should have received not less than **INR 61 Million** each for **Similar Works***** in Two Completed Contract Work

OR

Should have received not less than **INR 49 Million** each for **Similar Works***** in Three Completed Contract Work

4. Replace Clause No. Notes-1 with

Similar Works*** for this contract shall mean “Supply, Installation, Commissioning of integrated security systems for Central Govt. /State Government Department, Defence, Police Department, Railways, Airports, Metro Stations, /PSUs/ Urban Local Bodies / Private Corporates registered with NSE / BSE, in India”

The X-ray Baggage Scanner shall compulsorily be a major part of work order of past experience certificate (Presented by bidder under Similar Work) of bidder / Lead Member of JV/Consortium, which may or may not include Door Frame Metal detector (DFMD) or Hand Held Metal detector (HHMD).

5. Add New Clause No. Notes-10 with

Each bidder shall be required to successfully demonstrate the working and performance of X-ray baggage scanner system compliant to the Section VII-B Particular Specification X-Ray Baggage Scanner Clause 5.1.3.

PART-2: SECTION- VII-B: PARTICULAR SPECIFICATION – X-RAY BAGGAGE SCANNER

6. Replace Clause No. 2.1 with

X Ray Baggage Screening System to be provided at stations and other Metros Installations and shall consist of X ray machine, operator control console with suitable controls, stainless steel roller tables on entry side and exit side, LCD colour monitor, power cable, Combined Test Piece (CTP), Threat Image Projection (TIP) software etc.,

7. **Replace Clause No. 4 Sl.No. 2 with**
Conveyor height: Range of 675 mm – 800 (+/-2%)mm
8. **Replace Clause No. 4 Sl.No. 3 with**
Conveyor belt speed: Should be between 0.18 to 0.3 m/s in forward & Backward direction
9. **Replace Clause No. 4 Sl.No. 4 with**
Power Supply: All machines should operate on 230 VAC, 50 Hz power supply and should be able to withstand voltage fluctuations in the range of 170 V to 260 V, Single phase, 6 Amp Max.
10. **Replace Clause No. 4 Sl.No. 5 with**
Electrical safety or equivalent certificate such as UL or IEC shall be submitted.
11. **Replace Clause No. 4 Sl.No. 6 with**
Conveyor capacity: More than 160 Kg evenly distributed tolerance 10% or more.
12. **Replace Clause No. 4 Sl.No. 9 with**
X-Ray Generation
Voltage : Max 160 KV
Tube Current : Max 0.7 mA
Cooling : Sealed Oil Bath
Duty Cycle : 100%
X-Ray : "L"-Shaped array detector
13. **Replace Clause No. 4 Sl.No. 12 and 13 with**
Operating Temperature: 0°C to 50°C
Storage temperature: -20°C to 60°C
14. **Replace Clause No. 4 Sl.No. 15 with**
Resolution: The machine should be able to display single un-insulated tinned copper wire of 40SWG. All penetration and resolution condition should be met without pressing any functional key and should be online
15. **Replace Clause No. 4 Sl.No. 18 with**
Color Imaging: 4 Color Imaging or more based on Atomic Number
16. **Replace Clause No. 4 Sl.No. 19 with**
Image Processing :
Penetration : In Steel 35 mm Guaranteed or better
Wire Resolution : 40SWG Guaranteed or better
Contrast Sensitivity : 24 Visible Levels, 4096 Gray Levels
Beam Divergence : Diagonal and the X-Ray Image should come without any corner cut
Material Discrimination : Organic and inorganic material discrimination based on atomic number and density.
17. **Replace Clause No. 4 Sl.No. 21 with**
The vendor shall supply rodent protection, anti-rodent and dust proof cover, Control desk with security housing and locking provision should be available.

18. Replace Clause No. 4 Sl.No. 22 with

Radiation Safety: The machine must comply with requirements of health and safety regulations with regard to mechanical, electrical and radiation hazards. The supplier / manufacturer should furnish relevant certificate from Atomic Energy Regulatory Board of India regarding radiation safety. The company manufacturing the equipment should have ISO certification for manufacturing of X-Ray Screening machine in their technical submissions.

19. Replace Clause No. 4 Sl.No. 30 with

All models should have online recording facility and images can be recorded in DVDR/W or USB

20. Replace Clause No. 4 Sl.No. 38 with

Computer: Latest Configuration available in market, following specification may be used as reference but not limited, any deviation shall be justified:

- a) **Processor** - Intel® Core™ i5 Processor or better
- b) **Bus Architecture** - Intel® HD Integrated Graphics.
- c) **RAM** - 4GB
- d) **Hard Disk** - 1 TB or more
- e) **Video Card** - 1GB Video Card
- f) **CD-R/RW Drive** - DVD writer (optional)
- g) **Networking Facility** - 10/100/1000 on board integrated Network Port with remote booting facility remote system installation, remote wake up, out of band management using standard management software.
- h) **Operating System** - Windows/Linux
- i) **Suitable UPS**

21. Replace Clause No. 4 Sl.No. 39 with

The Feature should be compliant with following , but not limited to :

- a) All software features of machine should be online and password protected
- b) Advanced Image Archive, up to 150,000 images
- c) Thin object screening facility like razor blade, envelopes etc.
- d) ability to recall upto minimum 50 images
- e) Date and Time Display
- f) Inverse/Negative black and white Imaging.
- g) High Density Alert - Audio visual alarm and draw square around the object
- h) area where High density is found.
- i) Baggage Counter.
- j) Print Image Function if printer is connected.
- k) Successful logging in and logging off to be displayed.
- l) Dynamic Pseudo color and reverse Monochrome, edge & variable edge enhancement, date and time display
- m) 2X to 64X Zoom.
- n) User Defined manual and automatic Access to Image archive.
- o) Programmable Contrast levels.
- p) Organic and Inorganic Imaging.

- q) Color and Black & White Imaging.
- r) Edge & Variable-enhancement Imaging.
- s) Machine should be capable of recalling all previous images when scanner is switched on.
- t) Organic & Inorganic material discrimination.
- u) The system should be user friendly.
- v) Threat Image Projection (TIP) should be available & programmable.
- w) Variable brightness and contrast
- x) Machine shall be properly sealed
- y) If machine fails to penetrate a particular item then an audio and video alarm shall be generated
- z) Reversal Image direction - Ability to reverse the direction from where image is coming.

22. Clause No. 4 Sl.No. 40: deleted

23. Replace Clause No. 4 Sl. No. 45 with General requirement :

- a) Original equipment Manufacturer or their authorized representatives of X-Ray Baggage Inspection System shall have their services based in India.
- b) X-Ray Baggage Inspection System shall have quality system compliance (ISO9001 certificate for Design, Development, Manufacture of x ray machines required CE complied and (AERB) Atomic Energy Regulatory Board of India certified.
- c) International Radiation Safety Standards or equivalent is desirable. Manufacturers will have to produce a certificate in this regard for the particular model proposed in the bid.
- d) The X-Ray Equipment shall comply with the film safety of ten passes of ISO1600/33 DIN high-speed photographic film.
- e) All software and firmware upgrades shall be free of cost for lifetime of respective security equipment as per conditions mentioned in the tender. The PC of the Equipment shall be easily accessible and programmable

24. Add new Clause No. 4 Sl.No. 47 with

- a) The XBIS machine supplied shall have minimum service life of 10 years from the date of commissioning
- b) Scheduled maintenance of XBIS machine shall be carried out during 23.00 hrs of preceding day to 6.00 hrs of successive day. However in cases where certain XBIS machines are not functional during the non peak hours, then Maha-Metro at its sole discretion may permit contractor to undertake CAMC during the period from 6.00hrs to 23.00 hrs. unscheduled breakdown maintenance will be permitted during 6.00hrs to 23.00hrs to reduce the down time of machine.

25. Add new Clause No. 5.1.3 with

- a. Every bidder shall submit his offered equipment of XBIS machines along with complete accessories at his own cost for Technical Demonstration as a part of technical evaluation.

Maha-Metro appointed committee will witness technical demonstration tests on the offered equipment by bidders in Nagpur to evaluate its operational/ functional capabilities as per requirements of this tender. The Time and Venue of technical demonstration will be intimated to all bidder companies in due course of time. The technical demonstration will be fore equipment along with all associated items. The Technical Demo Test Procedure of Dual View X-ray machine is enclosed at **Annexure B**. The tests performed and checked in technical demonstration shall also be the part of the technical requirements of the employer and It is the duty of bidder to test and demonstrate the XBIS performance to the inspectors, ensuring that offered equipment meets the tender specifications. No bidder shall be given any exemption from technical demonstration due to any earlier trial conducted in India or abroad.

- b. Bidders not meeting Tender criteria even after clarifications sought by Maha-Metro and technical demonstration shall be disqualified for not meeting the eligibility or technical criteria described in the tender and their financial bids shall not be opened
- c. Factory Acceptance Test (FAT) shall be carried out before the supply of the machines. The bidder has to submit FAT Procedure of the equipment and associated parts offered, duly certified by OEM and preferably adopted by security agencies to whom the item has been supplied earlier, so that the technical specifications of the equipment can be verified/confirmed by Maha-Metro.

26. Clause 5.1.1 : Deleted

27. Replace Clause No. 5.2.1 with

TIP software should be compatible with other X - ray technologies such as automatic reject unit, automatic threat recognition system etc. All X-ray image functions shall be available at the same time along with the TIP.

28. Replace Clause No. 5.2.2 (a) with

The TIP facility should have an image library containing at least 100 Explosive devices, 100 knives and 100 firearms in various sizes, shapes, locations & orientations (100 images of each category). However, the system shall have without assistance of the manufacturer.

29. Replace Clause No. 6.4 with

SIMPLE PENETRATION (TEST NO. 4):

The requirement is that the lead should be visible beneath 35 mm of steel. This test defines what thickness of steel the machine should be able to penetrate. The steel step wedge on the CTP should have steps of 2 mm from 16 mm to 30 mm with a lead strip to check that the machine is above or below the requirement.

**PART-2: SECTION- VII-C: PARTICULAR SPECIFICATION – DOOR FRAME
METAL DETECTOR**

30. Replace Clause No. 1.3 (IV) with

The DFMD should conform to NIJ 0601.02/MHA standard for detection of large, medium & small size objects mentioned in the NIJ 0601.02/MHA standard. The detection should be done by passing the person in the middle of the DFMD with large, medium & small size objects and detection should be accurate pointing to correct zone.

31. Replace Clause No. 2 Sl.No. 2 with

- It should be capable to detect both ferrous and non-ferrous metals
- Uniform from top to bottom in all zones with pinpoint detection as per NIJ 0601.02/MHA standard for large, medium and small metal objects.

32. Replace Clause No. 2 Sl.No. 3 with**Passage Dimension**

Height – 200 cm approx.

Breadth – 72 cm approx.

Width – 57 cm – 80 cm.

33. Replace Clause No. 2.4 with**Accessories:**

The DFMD shall have accessories including a battery back-up module for emergency with minimum 8 hours of battery backup, various other optional accessories for remote use, desktop remote control, adhesive floor mounts and a microprocessor based control, monitor & analysis interface module as applicable for standalone/ networked DFMD. The software should provide network capabilities for remote access for data collection and alarm statistics for monitoring and analysis of networked DFMDs

PART-2: SECTION- VII-D: PARTICULAR SPECIFICATION – HAND HELD METAL DETECTOR**34. Replace Clause No. 2 Sl. No. 3 with****Battery:**

- Lithium Ion or NiMH rechargeable battery or 9v alkaline battery.
- Battery life min 100 hrs on alkaline battery and 45 hrs on rechargeable battery.
- Low battery indicator, both visual and audible.
- Must have wrist strap and good grip

35. Replace Clause No. 2 Sl. No. 8 with**Conformity:**

- Must conform the applicable CE/EU/ IS-12126/1987 standards for Electrical safety and EMC

36. Replace Clause No. 2 Sl. No. 11 with**Other Features:**

Digital filtering, user friendly diagnostics which should identify fault condition

PART-1: SECTION- II: BID DATA SHEET**37. Add Clause No. ITB 1.5**

1. Pursuant to the policy of the Government of India, Department of Industrial Policy and Promotion (DIPP) and Ministry of Housing and Urban Affairs (MoHUA) have issued 'Public Procurement (Preference to Make in India), Order 2017' vide No. P-45021/2/2017-B.E.-II dated 15th June 2017 further amended by order dated 28th May 2018 and office Memorandum no. F.No. K-14011/09/2014/UT- II/MRTS-Coord dated 14th Nov 2017 further amended by order dated 27th July 2018. With respect to

the above policy the minimum local content in procurement value of the Security Equipment Tender N1-(R)-O&M-04/2018 shall be 40%. The Bidder shall be required to provide a self-certificate or a certificate from the statutory auditor or cost auditor giving the percentage only of minimum local content and this self-certificate or certificate from statutory auditor or cost auditor shall be enclosed with the bid uploaded in technical section of e-tender portal. Only percentage values shall be mentioned in these certificates and no financial values shall be mentioned.

2. In case only self-certificate as per para(1) above has been submitted, the Bidder shall also be required to provide a certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content as specified in above MoHUA referred order after the Last Date stipulated for Bid Submission but within 15 days from the Last Date stipulated for Bid Submission (e.g. if the Last Date stipulated for Bid Submission is 15.07.2018, the certificate has to be submitted on or before 30.07.2018 during office hours). In case the certificate is not received within the stipulated time and duly signed by the person as above, the offer will be considered non-responsive and rejected; and the financial bid of such bidders shall not be opened. Only percentage values shall be mentioned in these certificates and no financial values shall be mentioned.

This Certificate shall be submitted physically in hard copy in the office of GM(Procurement) duly marked "Not to be Opened by Anyone except GM (Procurement)" at the following address:

GM (Procurement)
MAHARASHTRA METRO RAIL CORPORATION LIMITED,
"Metro House", 28/2, C.K. Naidu Marg, Anand Nagar,
Civil Lines, Nagpur - 440001

3. For the purpose of purchase preference to the Indian Bidders, this tender is classified as 'Non-Divisible'. Procedure for verification process, if needed and penalty for violation shall be applicable as per the above-referred Order dated 15th June 2017 further amended by order dated 28th May 2018
4. The technical offers of the Bidders who do not comply / submit the documentation as per above Para (2) with respect to order of DIPP letter No. P-45021/2/2017-B.E.-II dated dated 15th June 2017 further amended by order dated 28th May 2018 shall be rejected and considered non-responsive and their financial offers shall not be opened.
5. The minimum local content will further be certified for compliance of indigenous content by successful Bidder and reviewed during the design finalization stage.
6. **Margin of Purchase Preference:** In adherence to office Memorandum no. F.No. K-14011/09/2014/UT- II/MRTS-Coord dated 14th Nov 2017 further amended by order 27th July 2018, Margin of purchase preference for this work is 10% .

The procedure for purchase reference shall be applied as contained in the above-mentioned Order and salient features are highlighted below. For the purpose of this procedure, the procurement under this package is considered as 'Non-Divisible'. In the procurements of goods which are not divisible in nature, the following procedure shall be followed:

- i. Among all qualified bids, the lowest bid will be termed as L 1 if L 1 is from a local supplier, the contract will be awarded to L 1.
 - ii. If L 1 bid is not from a local supplier, the lowest bidder among the local suppliers, will be invited to match the L 1 price subject to the local supplier's quoted price falling within the margin of purchase preference (10%), and contract shall be awarded to such local supplier subject to matching the L 1 price.
 - iii. In case such lowest eligible local supplier fails to match the L 1 price, the local supplier with the next higher within the margin of purchase preference shall be invited to match the L 1 price and so on, and contract shall be awarded accordingly. In case none of the local suppliers within the Margin of purchase preference matches the L-1 price, then the contract may be awarded to the L 1 bidder.
7. In case company/firms are availing margin of purchase preference criteria, they shall submit the additional bank guarantee of 10%.
 8. Make in India policy Order 2017' vide No. P-45021/2/2017-B.E.-II dated 15th June 2017 further amended by order dated 28th May 2018 attached as annexure C.
 9. Ministry of Housing and Urban Affairs (MoHUA) order F.No. K-14011/09/2014/UT- II/MRTS-Coord dated 14th Nov 2017 further amended by order dated 27th July 2018 attached as annexure D.

38. Replace Clause No. ITB 22.1 with

The deadline for bid submission is:

Date: Shall be intimated

Time: shall be intimated

The Bidder shall, on or before the date and time given in the Notice inviting Bid or as may have been amended from time to time, upload his Bid on e-tendering portal <https://mahametrorail.etenders.in>. Bidders may refer to e-tender procedures (Toolkit for using e-tender portal) at [Annexure II-A](#).

The Bidders shall furnish the information strictly as per the formats given in the Bid documents without any ambiguity. The MAHA-METRO shall not be held responsible if the failure of any Bidder to provide the information in the prescribed formats results in a lack of clarity in the interpretation and consequent disqualification of its Bid.

In case of support or help required during online submission or difficulty encountered during online submission, the Bidders may contact the following officials: **(Helpline for on line submission of Bid only)**

1. Tender Executive: 9167969611

2. CPM/O&M: 7410004422**PART-1: SECTION- III A: MAKE IN INDIA POLICY, 2017****39. Part 1 Section IIIA : Deleted****PART-2: SECTION- IX: PARTICULAR CONDITIONS OF CONTRACT****40. Replace Clause No. 39 with**

During the Defects Liability Period/ Annual Maintenance Contract period the Contractor shall provide, free of cost, rectification/ reconstruction of faulty work. Competent and skilled personnel and maintain adequate stock of spares/ machine so as to promptly fulfil his obligations during the Defects Liability Period/AMC Period as laid down in GC and Works Requirements. A penalty of Rs.10000/- per day in DLP/AMC period will be imposed if Defect/ complaint/ faculty EMP is not attended within 24 hrs from the time and date of notice.

Maintenance during Defects Liability Period/AMC

Contractor shall establish an office for the purpose with communication facility so as to facilitate communication for reporting failures and liaison with maintenance staff manning the Station/Group of Stations round the clock. The supervisor in-charge should be provided with mobile communication facility to ensure his presence at the site immediately after reporting. Contractor shall ensure restoration/rectification/replacement, within reasonable time, to the satisfaction of Engineer. The Engineer in case of the delay as deems fit shall be empowered to carry out the maintenance at the risk and cost of the Contractor.

Routine Maintenance

Submit Monthly status report to the Engineer –in – Charge.

Repairs

All equipment that requires repairing shall be immediately serviced and repaired.

Complaints

The Contractor shall receive calls for any and all problems experienced in the operation of the Depot, attend to these without delay.

Maintenance Log Book

The Contractor shall maintain a Maintenance Log Book of each section of Depot, the format for which shall be approved by Engineer – in – charge. In the Maintenance Log book the details about date of Routine Maintenance, Routine Maintenance activities performed, Details of Call – out visit / complaints and its action taken report shall be maintained

Consumables and Spares

CAMC works include repair and replacement of defective hardware and software, equipment, systems and sub-systems including its spares and consumables (like batteries etc.), any future software or firmware up gradation without any additional cost.

The contractor has to maintain minimum 10% of the spare parts and consumables of the equipments supplied to MAHA METRO as on-site spares in Nagpur for immediate replacement during failures at the contractors cost to reduce the downtime. The defective parts should be replaced immediately in the interest of the contractor to avoid penalty for down time in case of system fails. If the repair is expected to take long time, the contractor must provide a temporary spare from his stock, till they are able to return the original after repairs.

This clause is to be read in conjunction with Clause No. 5.11 and 5.12 of '**Part-2 Section: VII A General Specifications**'.

41. Replace Section IX Part A Contract Data Clause no 5 with

Time for Completion: 18 (Eighteen) Months reckoned from the date of issue of LOA

PART-1: SECTION- II: BID DATA SHEET

42. Replace Clause No. ITB 2.1 with

Source of Fund for the project: The project is to be funded by Govt. of India and Govt. of Maharashtra

The name of the Employer is: Maharashtra Metro Rail Corporation Ltd.

Name of the project: Nagpur Metro Rail Project.

