

Addendum 2

Date: 24.10.2019

Standard Sets of Deviation

Sr. No	Section No.	Section Name	Page No.	Clause	Revised Clause
1.	Section 6 Volume I and Section 5.4 Volume IV	Key Terms and Definitions (Volume I)/ Implementatio n methodology (Volume IV)	15 (Volume I)/ 18 (Volume IV)	 Project Phases: 1. Project phase (As Built)- System to configured as per MMRC's needs, OEM specifications and RFP requirements. 2. Final Configuration phase (As Operated) – system to be configured/reconfigured as per O&M Contractor's requirements. 3. As Maintained- system to be configured to incorporate ongoing changes during operations and maintenance phase. 	 Revised clause to be read as: Project Stages*: Project Stage (As Built)- System to configured as per MMRC's needs- Part A: implementation of procurement, inventory and contracts modules Part B: Implementation of balance of the modules of IBM Maximo Final Configuration Stage (As Operated) – system to be configured/reconfigured as per O&M Contractor's requirements. As Maintained- system to be configured to incorporate ongoing changes during operations and maintenance stage Ref: Section 15 Volume IV
2.	7.13 Volume I	Earnest Money Deposit	20	Bidders shall submit, EMD of Rs. 82, 00, 000/- (Rupees Eighty Two Lakhs Only) through Online e-Tendering Payment Gateway mode only.	 Revised Clause shall be read as: 1. Bidders shall submit, EMD of Rs. 75, 00, 000/- (Rupees Seventy Five Lakhs Only) through Online e-Tendering Payment Gateway mode or in the form of bank guarantee validity of which shall be 180 days from date of submission of bid. Bank guarantee scanned copy to be uploaded in the portal. (Ref: Annexure E) 2. Bidders may be exempted from earnest money deposit as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprise (MSME) or are registered with the Central Purchase Organization or the concerned ministry or



Sr. No	Section No.	Section Name	Page No.	Clause	Revised Clause	
					department. However, bidder shall have to submit MSE certificate on tender portal	
3.	Section 7.24 Volume I	Qualification Criteria	27	Q7. Certificates The lead bidder must have the following certifications: - ISO 9001 certification - ISO 27001 certification - (SEI) CMMI certification Level 3 and above - ISO/IEC 20000 certification Copy of Valid Certificates	Revised clause 7.24 Q7 to be read as:The lead bidder must have the following certification:- (SEI) CMMI Level 3 or above- ISO 27001 certificationCopy of Valid Certificates as of date of submission of band duly signed and stamped by the authorizedsignatories of the bidder	
4.	3.2 Form 17 Sub- table A.3 Volume II	Financial Proposal Format	37	Financial Proposal Format "Cost of training and capacity building" format	New line item for "Training during Project Stage- II" added in the sub-table A.3 Revised financial proposal format for "Cost of training and capacity building" enclosed in Annexure A	
5.	3.2 Form 17: Sub- table A.5 Volume II	Financial Proposal Format	38 to 42	Financial Proposal Format "End Infrastructure (Hardware) Setup Cost"	Revised Financial Proposal Format "End Infrastructure (Hardware) Setup Cost" enclosed in Annexure C	
6.	Section 7 Volume IV	Testing Services	31	 User Acceptance Testing (UAT) Facilitation: a. UAT1: User Acceptance Testing 1 is to be done after the project phase. b. UAT2: User Acceptance Testing 2 to be performed after the changes as the O&M requirements as agreed upon in the final configuration phase 	 Revised clause be read as: User Acceptance Testing (UAT) Facilitation: a. UAT1: User Acceptance Testing 1 is to be done in the Part A of Project Stage b. UAT2: User Acceptance Testing 2 is to be done in Part B of Project Stage c. UAT3: User Acceptance Testing 3 to be performed after the changes as the O&M requirements as agreed upon in the final configuration Stage 	
7.	15.1 Volume IV	Table A: Project Execution Schedule	42, 43, 44	Project Execution Schedule	Revised Project Execution Schedule enclosed in Annexure B	



Sr. No	Section No.	Section Name	Page No.	Clause	Revised Clause
8.	Section 4 Volume IV	License Requirements	11 & 12	Licenses required for CAMS	Revised licenses required for CAMS are enclosed in Annexure D
9.	Section 24.11 Volume IV	Architecture/ Technology	84	Capability to support multilingual including:- • English • Hindi • French	Revised clause be read as: Capability to support three languages including: • English • Hindi • Marathi
10.	Add new clause: Section 10 Volume IV	MIS Requirements	35		New clause added as: Service Provider should provision some reports to be generated in Hindi and Marathi language as per MMRC's requirements. Exact number of such reports shall be ascertained during requirement gathering phase
11.	Section 5.4 Volume IV	Implementatio n Methodology	19	Service Provider shall ensure latest version of Maximo at time of system go-live	Revised clause be read as: Service Provider shall ensure one upgrade to latest version of Maximo before Final Go-Live
12.	Section 7.3 Volume I	Overview of the project	18	In order to make the preventive maintenance of the complex asset classes across all the system packages seamless and automated MMRC has decided to procure and deploy IBM Maximo Enterprise Asset Management System which will serve the purpose of a Common Asset Management System (CAMS) for Mumbai Metro Line 3.	Revised clause be read as: In order to make the preventive maintenance of the complex asset classes across all the system packages seamless and automated MMRC has decided to procure and deploy IBM Maximo Enterprise Asset Management System which will serve the purpose of a Common Asset Management System (CAMS) for Mumbai Metro Line 3. The Common Asset Management system shall be used during the project implementation stage by contractors, GC and MMRC and after revenue operation date (ROD), the same CAMS will be continued to be in use during DLP and subsequently during O&M phase as well including by operator appointed by MMRC
13.	Add new sub-clause: Section 3	Purchase Preference to local suppliers			New clause added as:



Sr. No	Section No.	Section Name	Page No.	Clause	Revised Clause
	Instruction to bidders Volume I				Purchase preference shall be given to local suppliers in the procurement undertaken by MMRC in the manner specified hereunder: The following procedure shall be followed: i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is from the local supplier, the contract will be awarded to L1 ii. If L1 is not from a local supplier, the lowest bidder among the local suppliers, will be invited to match the L1 price subject to local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such local supplier subject to matching the L1 price iii. In case such lowest eligible local supplier fails to match the L1 price, the local supplier with the next higher bid within the margin of purchase preference shall be invited to match the L1 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 L1 price, then the contract may be awarded to the L1 bidder
14.	Add new sub-clause Section 4.3 Volume IV	Supply of Hardware	13		Procurement of hardware shall be according to the notification issued by Ministry of Electronics and Information Technology "Public Procurement (Preference to Make in India) Order 2017- Notifying Electronic Product in furtherance of the order" (Ref: Annexure F- to be submitted along with financial bid)



Annexure A: Cost of Training and Capacity Building

S. No.	Item-list	Total Amount excluding Taxes (INR)
(a)	(b)	(c)
A.3.1	Initial training during Project Stage Part A	A.3.1
A.3.2	Training during Project Stage Part B	A.3.2
A.3.3	Final training during Final Configuration Stage	A.3.3
Total in words	(A3 = A.3.1+A.3.2+A.3.3)	<u>"A.3"</u>
(This figure sh	all be used for evaluation in Sub-table – A in "A.3")	<u>A.J</u>



Annexure B: Project Execution Schedule

S. No.	Project Activity	ty Deliverables		Paymen	t Terms
			Timeline (In days)	On Delivery	On Final Go Live
	START (DF PROJECT STAGE (As-Built) (T=0= Issue of Le	etter of Acce	ptance)	
		of Part A Contracts, Procurement, Inventory Modules and			
		Conceptual design submission	T + 30	20% of A.2.1	10% of A.2.1
1.	Project Initiation &	Initial training on IBM Maximo/ Live Demonstration	T + 45	100% of A.3.1	NA
	Solution Design	Definitive design submission	T + 60	20% of A.2.1	NA
	Supply of software and	Proof of supply of software licenses for Stage-I (Ref: Volume IV Section 4. License Requirements)	T + 30	80% of A.1	20% of A.1
2.	hardware for Stage-I	Proof of supply of hardware for Part A (Ref: Volume II Section 3.2 Sub-table A.5 End Infrastructure Set up Cost)	T + 30	80% of A5 (I)	20% of A5(I)
3.	Installation of hardware and software	Installation of hardware and software for Stage-I	T + 45	80% of A5 (II)	20% of A5 (II)
4.	Go-Live Stage-I	 Pilot, UAT1 and sign off for contracts, procurement and inventory modules of Maximo Asset database and BIM integration for Part A (this activity will continue till completion of Project Stage (T + 240) as per inputs from system contractors) 	T + 120	30% of A.2.2	10% of A.2.2
		Go-live of Part A (T =120)			
		Start of Part B (T=120)			
5.	Initiation of implementation of balance modules and solution design	Detailed Design Submission covering implementation of Maximo	T+150	30% of A.2.1	NA
	Implementation,	Implementation of the IBM Maximo solution with balance modules as per RFP including maintenance schedule	T + 210	40% of A.2.2	NA
6.	Development/ customization/ of initial	• Training for Part B	T + 225	100% of A.3.2	NA
0.	configuration of the CAMS solution and go- live of Stage II	 Successful Pilot of configured CAMS solution Successful UAT2 Deployment and Go-Live of Stage II 	T + 240	20% of A.2.2	NA



S. No.	Project Activity	Project Activity Deliverables		Payment Terms	
			(In days)	On Delivery	On Final Go Live
		Completion of Part B (T=240)			
		COMPLETION OF PROJECT STAGE (As Built) (T+240)		
	STA	RT OF FINAL CONFIGURATION STAGE (As Ope	erated) (T+24	0)	
		Start of Integration Of CAMS With Systems (T+	240)		
7	Supply of hardware and software for Final	• Proof of supply of software licenses for Final Configuration Stage (Ref: Volume IV Section 4. License Requirements)	T + 285	80% of A.1	20% of A.1
7.	Configuration Stage	• Proof of supply of hardware for Final Configuration Stage (Ref: Volume II Section 3.2 Sub-table A.5 End Infrastructure Set up Cost)	T + 285	80% of A5 (III)	20% of A5(III
8.	Installation of hardware and software	• Installation of hardware and software for Stage-II	T + 330	80% of A5 (IV)	20% of A5(IV
9.	Implementation and Integration of middleware/ESB COTS solution and Integration to Metro/Railway sub- systems and Integration to other Functional systems (ERP etc.)	• Integration and Interfacing with Metro Railways sub- systems (Ref. Section 6.4 Volume IV) (this activity will continue till completion of the project as per availability of metro systems to be integrated with CAMS)	From T+330 till end of the project	Refer Table B	
	Training post integration of systems with CAMS	• Training for CAMS and metro systems integrated	T + 510	100% of A.3.3	NA
		Completion of Integration Of CAMS With Systems (•		
		Start of Reconfiguration as per O&M Contractor (1	r + 510)		
10.	Project Initiation & Solution Design	• Detailed Design updated as per inputs from O&M Contractor	T + 510	20% of A.2.1	NA
11.	Final Configuration Stage - system to be configured/reconfigured	• UAT3 and Sign off from O&M contractor for configuration/reconfiguration of the IBM Maximo solution in accordance with O&M contractor	T+570	70% of A 2.3	30% of A 2.3



S. No.	Project Activity	ity Deliverables		Payment Terms			
			(In days)	On Delivery	On Final Go Live		
	as per 0&M Contractor's requirements						
		Completion of Reconfiguration as per O&M Contracto	or (T+570)				
12.	Final Training	 Final Trainings for complete integrated solution with agreed methodology and locations specified by MMRC Training manuals/ Standard Operating Procedures 	T+600	90% of A.3.2	10% of A.3.2		
13.	Security Audit I	Audit certificate for completion of successful audit	T+600	90% of A.4.1	10% of A.4.1		
14.	Final Go Live	 Final Go-Live after reconfiguration as per inputs from O&M contractor Sign off from MMRC and O&M contractor for successful configuration 	T+720	Payment as due post final go-liv			
	COMPLETION OF FINAL CONFIGURATION STAGE (As operated) (T+720)						
	START OF POST GO-LIVE SUPPORT (As maintained) (T+720)						



Annexure C: End Infrastructure (Hardware) Setup Cost

(Cost for setup of Hardware infrastructure effective functioning for CAMS and Middleware/ESB COTS solution)

The list of hardware is not exhaustive and hence service provider can provide any added hardware required along with its cost within the financial format.

S. No.	Hardware components	Item-wise Descriptions	Unit Cost excluding Taxes (INR)	Quantity	Total Cost excluding Taxes (INR)
(a)		(b)	Supply	(d)	(e1) = (c1)*(d)
(a)		(0)	(c1)		A.5 (I)
PROJEC	T STAGE				
Part-A					
A.5.1	Development/Te st Server	Server -Intel Xeon E5-2630 v4 2.1GHz,/98GB RDIMM,/2X1.2TB 10K RPM SAS 2.5in Hot- plug Hard Drive/Linux Server Standard (Physical Virtual Server) High Availability, equivalent to HP, Dell, IBM or similar		1	A.5.1
A.5.2	CAMS Application /Database server	Server -Intel Xeon E5-2630 v4 2.1GHz,/70GB RDIMM,/2X1.2TB 10K RPM SAS 2.5in Hot- plug Hard Drive/Linux Server Standard (Physical Virtual Server) High Availability, equivalent to HP, Dell, IBM or similar		2	A.5.2
A.5.3	Backup Server	Server-Intel Xeon E5-2620 v4 2.1GHz/32GB RDIMM,2X600GB 15K RPM SAS 2.5in Hot- plug Hard Drive, Linux Server Standard (V Center & Backup Server), equivalent to HP, Dell, IBM or similar		1	A.5.3



S. No.	Hardware components	Item-wise Descriptions	Unit Cost excluding Taxes (INR)	Quantity	Total Cost excluding Taxes (INR)
A.5.4	SAN DC	Bulk Storage NX430 Base 5TB		1	A.5.4
A.5.5	Server Virtualization Software	Software & License With Tech Support as per requirement		1	A.5.5
A.5.6	UPS	20kVA smart UPS with AMC for 2 years		1	A.5.6
A.5.7	Server OS	Linux OS		8	A.5.7
A.5.8	Antivirus	Antivirus for Servers		4	A.5.8
A.5.9	Backup Software	Backup & replication enterprise for virtualization software Backup upto 1 TB		4	A.5.9
A.5.10	Firewall	18 x GE RJ45 including 2 x WAN ports, 1 x MGMT port, 1 X HA port, 14 x switch ports, 4 x GE SFP slots. SPU NP6Lite and CP9 hardware accelerated.		1	A.5.10
A.5.11	Firewall Support	24x7 Application Control, IPS, AV, Botnet IP/Domain, Web Filtering & Anti-spam Services 3 Yrs		1	A.5.11
A.5.12	WAP	Wireless N Access Point (compatible with firewall)		30	A.5.12
A.5.13	NLB	Link load balancer		1	A.5.13
A.5.14	Rack	42U Rack Frame/800X1000/Steel/NRS1		2	A.5.14
A.5.15	Cables	Cables, connector and Patch cords (Rack and misc. cables)		Lump sum	A.5.15



S. No.	Hardware components	Item-wise Descriptions	Unit Cost excluding Taxes (INR)	Quantity	Total Cost excluding Taxes (INR)
A.5.16	Networking	Networking of All installed Hardware		Lump sum	A.5.16
A.5.17	SAN for back up data	Bulk Storage NX430 Base		1	A.5.17
Total Su	apply Cost		L		A.5 (I)
Total In	stallation Cost			Lump sum	A.5 (II)
Final Co	nfiguration Stage			I	
A.5.18	Middleware/ESB COTS Hardware For Production	Intel Xeon E5-2600 v3 (3.20GHzz)/15 MB/2 x 32 GB RAM/SAS/SATA 2 x 500GB SAS (2.5" with 3.5" carrier) 10K RPM/RAID 10 or Higher/DVD RW, 1 x RPS inbuilt (750W)		2	A.5.18
A.5.19	Middleware/ESB COTS Hardware For UAT/Test	Intel Xeon E5-2600 v3 (3.20GHzz)/15 MB/2 x 32 GB RAM/SAS/SATA 2 x 500GB SAS (2.5" with 3.5" carrier) 10K RPM/RAID 10 or Higher/DVD RW, 1 x RPS inbuilt (750W)		1	A.5.19
A.5.20	Middleware/ESB COTS Hardware For Development	Intel Xeon E5-2600 v3 (3.20GHzz)/15 MB/2 x 32 GB RAM/SAS/SATA 2 x 500GB SAS (2.5" with 3.5" carrier) 10K RPM/RAID 10 or Higher/DVD RW, 1 x RPS inbuilt (750W)		1	A.5.20
A.5.21	Managed L2 Switch*	Networking N1524, 24x 1GbE + 4x 10GbE SFP+ fixed Managed Switch		54	A.5.21



S. No.	Hardware components	Item-wise Descriptions	Unit Cost excluding Taxes (INR)	Quantity	Total Cost excluding Taxes (INR)
A.5.22	User Terminal/ Workstation*	i5 or better/8 GB/500 GB/Win 10 Pro/23" - E2016H/DVD RW/3 Yrs		52	A.5.22
A.5.23	Printer*	A4 B/W laser printer with preloaded cartridge		52	A.5.23
A.5.24	Relocation of DC*	Relocation of DC from MMRC Space to Depot		Lump sum	A.5.24
Total S	upply Cost				A.5 (III)
Total Ir	stallation Cost	A.5 (IV)			
	words (A.5 = A.5 () gure shall be used f	"A.5"			

*Date of delivery depends on the availability of space and readiness at site locations



Annexure D:

Licenses required for CAMS are as under:

I. During Project Stage (Stage A): (T + 30 days)

S. No.	Description of Licenses	Quantity (Users)
1	IBM Maximo Asset Management Power User License	10
2	IBM Maximo Asset Management Business User License	30
3	IBM Maximo Asset Management Express User License	10
4	IBM Maximo Asset Management Scheduler License	4
5	IBM Maximo Linear Asset Manager License	4
6	IBM Maximo Asset Configuration Manager License	1
7	IBM Maximo HSE License	1

II. During Final Configuration Stage (T + 270 days)

S. No.	Description of Licenses	Quantity (Users)
1	IBM Maximo Asset Management Power User License	10
2	IBM Maximo Asset Management Business User License	30
3	IBM Maximo Asset Management Express User License	110
4	Middleware License - Enterprise Service Bus for Integration/Interfacing	1 – Prod.
4	with Metro sub-systems and Functional systems	1 – Non-Prod./Dev.



Annexure E: EMD Bank Guarantee

Bank Guarantee Format

Form of Bid Security (Bank Guarantee)

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

To Chief General Manager (Signal & Telecom), Mumbai Metro Rail Corporation, Ground Floor, Wing A, MMRC Transit Office North Side of City Park, 'E' Block Bandra Kurla Complex, Bandra (East) Mumbai—400 051

Whereas, <<name of the supplier and address>> (hereinafter called "the Bidder") has undertaken, in pursuance of contract no. <Insert Contract No.> dated. <Date> to provide services for << Design, Supply, Installation, Testing, Integration, Commissioning and Support of Common Asset Management System (CAMS) for Mumbai Metro Line 3 (MML3)>> to Employer (hereinafter called "the beneficiary")

And whereas it has been stipulated in the said contract that the Bidder shall furnish a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the RFP for Earnest Money Deposit (EMD);

And whereas we, <Name of Bank> a banking company incorporated and having its head /registered office at <Address of Registered Office> and having one of its office at <Address of Local Office> have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the Service Provider, up to a total of Rs.<Insert Figure> (Rupees <Insert value in words> only) and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of Rs.<Insert Figure> (Rupees <Insert value in words> only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

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



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

This Guarantee shall be valid until <<Insert Date>>).

Notwithstanding anything contained herein:

- I. Our liability under this bank guarantee shall not exceed Rs.<Insert Figure> (Rupees <Insert value in words> only).
- II. This bank guarantee shall be valid up to <Insert Expiry Date>)
- III. It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this bank guarantee that we receive a valid written claim or demand for payment under this bank guarantee on or before <Insert Expiry Date>) failing which our liability under the guarantee will automatically cease.

Dated _____ Day of ____ 2019

For _____

(Indicate the name of the Bank)



Annexure F: Certificate of Minimum Local Content for availing the purchase preference

We, the Bidder, do hereby certify that the facilities offered under the contract in compliance to:

- 1. Department of Industrial Policy and Promotion (DIPP) notification No.P-45021/2/2017-B.E.-II dated 15.06.2017 as amended by order No. P-45021/2/2017-B.E.-II dated 28.05.2018 as amended by order No. P-45021/2/2017-PP (B.E.-II) dated 29.05.2019
- 2. "Public Procurement (Preference to Make in India) Order 2017- Notifying Electronic Products in furtherance of the Order dated 14.09.2017" issued by Ministry of Electronics and Information Technology

That the Local content in the proposed Bid shall be____% of the total value of the contract.

Authorized Signatory

[Insert name of signatory; title]

For and on behalf of [Insert name of the bidder]

Date:

Notes:

- 1) The above Certificate is to be submitted only by those Bidders who wish to avail Purchase Preference as per policies 1 and 2 as mentioned above
- 2) In case of procurement for a value is more than INR 10 Cr, the bidder shall 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
- 3) For Procurement up to INR 10 Cr, the Bidder shall submit self-certification of the percentage of local content.
- 4) If any false declaration regarding local content is found, this will be in breach of code of Integrity under Rule 175 (1)(i)(h) of the General Financial Rules for which the Bidder or its successor can be debarred for a period of 3 years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under the law.
- 5) A bidder who has been debarred by any procuring entity for violation of the conditions of purchase preference shall not be eligible for preference for procurement by any other entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of the other procuring entities.
- 6) The bidder is to submit self-certified worksheet of arriving at the percentage mentioned in above certificate.