## Minutes of Meeting

Sub: Minutes of Pre-EoI meeting for Selection of System Integrator (SI) for Design, Development and Implementation of Regional Information System for Mumbai Metropolitan Region and Urban Observatory at MMRDA, held under the Chairmanship of Shri. S C Deshpande, Chief, Town and Country Planning Division, MMRDA on 7<sup>th</sup> December, 2022 at 15.00 hrs IST.

The Pre-Eol meeting for Selection of System Integrator (SI) for Design, Development and Implementation of Regional Information System for Mumbai Metropolitan Region and Urban Observatory at MMRDA was held under the Chairmanship of Shri. S C Deshpande, Chief, Town and Country Planning Division, MMRDA at Committee Room, 4th Floor, MMRDA Main Building, BKC, Bandra (E), Mumbai on 07.12.2022 at 15.00 hrs IST.

The meeting was held to discuss the pre Eol queries raised by the participants and their corresponding responses or suggestions. The meeting was attended by the participants (in person/ through Video Conferencing) and by the concerned officials of MMRDA (Annexure -1 & 2).

At the outset, Shri. Shri. S C Deshpande, Chief, Town and Country Planning Division, MMRDA welcomed all the participants and briefed them about the purpose of the Pre - Eol meeting followed by brief presentation on the topic by Shri. Dhananjay Kaware, Planner (Planning Division). The participants discussed their concerns with respect to Scope of Work, Eligibility Criteria, etc mentioned in Eol document.

The discussion held and the clarification given during the meeting are as below:

S. No.	Point of Discussion	Issues and Discussions	Suggestions/ Clarifications given by MMRDA
1	Data	The participants enquired	It was informed that MMRDA
	Collection	about Orders/ MoU/	will do the necessary official

		Agreement/ other Communications with the agencies to share data/ API. The common queries were: • the amount and type of data to be collected, • period for data collection and, • phasing of the data collection. • Sharing of data available with MMRDA. • Existing systems in MMRDA	process/ communication required for data sharing by the agencies. The tentative list of agencies and data are provided as annexures to EoI and will be part of the tender document. The data to be collected is of both spatial and non-spatial nature, and the scope of project involves attaching the non-spatial data to spatial features in GIS. The data which is available with MMRDA will be shared as required for the project. There is no web based spatial system in MMRDA. The data has to be collected as per the timeline which will
2	Analysis of data	The participants enquired about scope of data analytics.	be stipulated in the RFP document. It was informed that major scope of RIS is to spatially represent the data to citizens and dashboard of such data with basic analytics. It will be further detailed out in tender document based on
3	Software/ System	The participants enquired whether COTS software's to be used.	response to Eol. The required software's/ hardware's and their type/ form/ quantity/ any other specification required, for fulfilling the scope of the subjected project has to be detailed out by System Integrator.

4	Requirement mentioned by MMRDA in Eol Document	<ul> <li>The participants enquired about:</li> <li>As new talents will be hired is it necessary to share present team profile.</li> </ul>	It was informed that as this is EoI stage, MMRDA requires to know the profile of expertise available as of now with the participants and requested to comply with the EoI document requisite.
		<ul> <li>Compulsory JV with academic intuitions</li> <li>Preference/ Waivers/ weightage to Academic institutions/ MSME.</li> <li>Financial Capability</li> </ul>	Compulsory JV with Academic institution is not a requisite. All other criteria's is as mentioned in Eol document
5	Scope of System Integrator	The participants asked to detail out the scope of System Integrator.	It was clarified to the participants that SI have to Design, Develop and Implement the Regional Information System along with data collection. Scope will be further detailed out in tender document based on response to Eol.
6	Extension of Last Date of Submission	The participants requested time to submit queries.	It was informed that the participants can submit their queries on/ by 15/12/2022 17.00 Hrs IST. If necessary MMRDA may issue clarification/ corrigendum on MMRDAs portal.
		It was also requested to extend the last date of submission accordingly.	The necessary decision regarding extension of last date of submission of EoI will be taken and informed accordingly.
7	Request for Proposal (RFP)	The participants enquired whether the RFP will be open or closed.	The necessary decision regarding this will be taken and informed accordingly.

The meeting ended with thanks to the Chair.

Annexure-1

#### Selection of System Integrator (SI) for Design, Development and Implementation of Regional Information System for Mumbai Metropolitan Region and Urban Observatory at MMRDA

### Pre-EOI meeting 07/12/2022 15.00 Hours

Committee Room, 4th Floor, MMRDA Main Building, BKC, Bandra (E), Mumbai

S. No.	Name and Designation of concerned MMRDA officials
1	Shri. S.C. Deshpande, CTCP - Chairperson
2	Shri. M.D. Mane - Addl. Chief
3	Shri. Nilesh Gaikwad - Senior Planner
4	Shri. Dhananjay Kaware - Planner
5	Smt. Nithish P T - Dy. Planner
6	Shri. Atul Gosavi - Dy. Planner

	List of Participants			
S. No.	Company Name			
1	M/s Oasys Cybernetics Pvt.Ltd.			
2	SATRA Services and Solutions Pvt. Ltd.			
3	Louis Berger (A WSP Company)			
4	Bhugol GIS Pvt. Ltd.			
5	Esri India Technologies Pvt. Ltd.			
6	Genesys International Corporation Limited			
7	Grant Thornton Bharat LLP			
8	Ceinsys Tech Limited			
9	Trigyn Technologies Limited			
10	PricewaterhouseCoopers Private Limited			
11	NEC Corporation India Private Limited			
12	Assystem STUP			
13	World Wide ITES			



# **MMRDA's Response to Queries**

Tender No.: PD/RIS/EOI/299/2022

Name of Tender/EOI: Expression of Interest for "Selection of System Integrator (SI) for Design, Development and Implementation of Regional Information System for Mumbai Metropolitan Region and Urban Observatory at MMRDA."

S. No.	Clause No. of	Page	Content of EOI	Change Requested/ Clarification required	MMRDA's response/ Clarification
	Eol Document	No.	Requiring Clarification		
1	i) Data Collection/ Creation of comprehensive RIS database		<b>.</b> .		The tentative list of data and the government agencies is provided in Annexure - 1 of EoI document. The SI is expected to submit a detailed list of data from agencies and methodology to collect the data and create a standardized data model for continuous data retrieval. All the required task to migrate and overlay data on basemap has to be done (to the extent possible, based on discussion and instructions from MMRDA), including data cleansing, if required.
2	vi) General Requirements	41	c. The Applicant shall ensure the GIS integration with existing and proposed systems like, SCADA Systems, Property Tax, BPAS, e Office, PAP system, surveillance, Traffic management system, etc. at application level. The level of integration with the selected existing systems shall be assessed by vendor during the system study.	Will the department share the necessary APIs for integration ?	MMRDA will co-ordinate with the agencies for the necessery permission for sharing of APIs.
3	vi) General Requirements		f. The Applicant shall be solely responsible for testing, web hosting, and commissioning of the complete and accepted web RIS portal on the cloud.		Initial hosting will be on cloud. Based on DPR of SI, hosting on premises will be decided upon. The space for hosting will be provided by MMRDA, however, SI has to manage and design the space. To be further detailed out at RFP stage after studying Eol responses.

S. No.	Clause No. of Eol Document	Page No.	Content of EOI Requiring Clarification	Change Requested/ Clarification required	MMRDA's response/ Clarification
4	v) Operation and maintenance (O&M)	40	a. O&M phase shall start after the successful completion of Final User Acceptance Test and shall include various activities like GIS application upgrade, additional training etc.	a) How many users are to be trained ? b) Will training be an ongoing process ?	Shall be part of DPR to be submitted by SI after awarding of the contract.
5			General	What is the number of concurrent users	Shall be part of DPR to be submitted by SI after awarding of the contract.
6			General	What is the number of transactions per day ?	At this stage, transactions are not part of RIS. Though, the system shall be able to integrate said feature at later stages.
7			General	What is the maximum size of write transaction per year ?	- Not applicable
8			General	Are there any documents upload permitted ?	Shall be part of DPR to be submitted by SI after awarding of the contract.
9			General	Maximum File Size in MB	Shall be part of DPR to be submitted by SI after awarding of the contract.
10			General	Max files per user ?	Shall be part of DPR to be submitted by SI after awarding of the contract.
11			General	Database backup policy	Shall be part of DPR to be submitted by SI after awarding of the contract.
12			General	Database retention policy	Shall be part of DPR to be submitted by SI after awarding of the contract.
13			General	DC-DR Policy	Shall be part of DPR to be submitted by SI after awarding of the contract.
14			General	RPO - Recovery Point of Object ?	Shall be part of DPR to be submitted by SI after awarding of the contract.
15			General	RTO Recovery Time of Object	Shall be part of DPR to be submitted by SI after awarding of the contract.
16			General	Data Archival Policy	Shall be part of DPR to be submitted by SI after awarding of the contract.
17			General	What is Project Budget ?	To be further detailed out at RFP stage after studying Eol responses.
18	Appendix to EOI Document (AEOI), Eligibility and Qualification Criteria	35	as International Academic institutions with a dedicated research wing, can	We request Client to consider any software developing firm with meeting criteria as JV partner in the LA +2 JV partners. Please Confirm?	Yes.

S. No.	Clause No. of	Page	Content of EOI	Change Requested/ Clarification required	MMRDA's response/ Clarification
	Eol Document	No.	Requiring Clarification		
19	Schedule II: Qualification Criteria	45	The Applicants shall have experience acting as a System Integrator role for GIS and data analytics implementation.	We request Client to provide details of expected GIS system integration roles. Please clarify?	Shall be part of DPR to be submitted by SI after awarding of the contract.
20	General requirements	41	a. The Integrated GIS application shall be accessed by Authority staff within the MMRDA and Other government entities (ULBs, Police, PWD, Health, Education, Transport, power supply etc.) and Citizen users		Shall be part of DPR to be submitted by SI after awarding of the contract.
21	Operation and maintenance (O&M)	40	a. O&M phase shall start after the successful completion of Final User Acceptance Test and shall include various activities like GIS application upgrade, additional training etc.	What is the tenure for development phase to commence the 5 year O& M phase? Please Clarify?	To be further detailed out at RFP stage after studying Eol responses.
22	Tentative deliverables/Outcome		"Provide necessary manpower for the functioning of RIS"	Whether man power deployment necessary for RIS functioning? Please Clarify?	To be further detailed out at RFP stage after studying Eol responses.
23		40	g.The RIS should have provision for easy integration with the third-party system through APIs based integrations.	API's required for integrating third party systems, will MMRDA provide concerned APIs or the Applicant should take care? Please Clarify?	MMRDA will co-ordinate with the agencies for the necessery permission for sharing of APIs.
24	Annexure-1	79	Following are the tentative list of agencies and data to be collected from them		MMRDA will co-ordinate with the agencies for the necessery permission for data collection and point of contact will be appointed after awarding of contact.
25	General				Shall be part of DPR to be submitted by SI after awarding of the contract.
26	General			What is the tentative project implementation tenure? Please Clarify?	To be further detailed out at RFP stage after studying Eol responses.

S. No.	Clause No. of	Page	Content of EOI	Change Requested/ Clarification required	MMRDA's respor
~-	Eol Document	No.	Requiring Clarification		
27	Clauseno. 3.0 (Appendix to EOI Document (AEOI))	34	Nature of Applicants eligible - Recognised National as well as International Academic institutions with a dedicated research wing, can be considered for JV and shall be preferred during evaluation ( shall be omitted from financials eligibility criteria for the membership, subjected to submission of the necessary supporting documents)	An eminent Professor with relevant experience from one of the top technical institutes of Govt. of India can form a JV with the private company with a letter of association from the Technical Institution. Please clarify.	Clause 3.0 , AEOI (Pa "Recognised National Academic Institutions research wing can be
28	Clauseno. 3.0 (Appendix to EOI Document (AEOI))	34	The Applicants shall Provide the Certificate from the HR/ Authorized Signatory on the Company letter head confirming the staff (Minimum 10 Nos) with their experience in years and expertise in the subject concerning the said EOI in consideration and other relevant professionals employed full time in Pay Roll of Applicant as on date of submission of Bid.	In the event, the JV is between a company and an Academic Institution, the criteria is to be jointly fulfilled by the JV/consortium or separately?	Refer Clause 3.0 , AE Schedule II (page 45) Schedule II (page 46-4
29		39	To migrate the data to GIS platform and overlay on base map to create the comprehensive GIS database.	It is understood that the agencies mentioned in annexure 1 shall provide data as per the New GIS data model being provided. Kindly confirm the same.	The data to be collected (non-GIS) and non- sp non-digital) which has GIS environment as p developed by SI and c map. All the required to overlay data on basen
30		39	Design and develop applications for accessing RIS Platform on smart phone and tablets.	Will it have any map based functionalities for users and citizens on mobiles?	Yes.
31		39	The system should be optimized for access on multiple types of devices i.e., computers, tablets and mobile	It is assumed Operating System IOS, Android for mobiles and tablets and Mac and Windows for computers.	Yes.
32		40	The proposed system shall provide a provision for integrating the live feed data (audio/ visual data, dynamic data i.e., traffic, CCTV, Rainfall data and temperature data, etc.) generated from MMRDA or the external agencies, to the RIS database and further to RIS dashboard as and when required.		MMRDA will co-ordina for the provision of ne data protocols.

required	MMRDA's response/ Clarification
ce from one of the orm a JV with the rom the Technical	Clause 3.0 , AEOI (Page 35) details out "Recognised National or International Academic Institutions with a dedicated research wing can be considered for JV"
nd an Academic by the	Refer Clause 3.0 , AEOI (Page 35), Schedule II (page 45) and Note 2 & 3, Schedule II (page 46-47).
in annexure 1 shall being provided.	The data to be collected will be in spatial (non-GIS) and non- spatial formats (digital/ non-digital) which has to be migrated to GIS environment as per GIS data model developed by SI and overlayed on base map. All the required task to migrate and overlay data on basemap has to be done.
users and citizens	Yes.
d for mobiles and	Yes.
eing used by sharing.	MMRDA will co-ordinate with the agencies for the provision of necessery live feed data protocols.

S. No.	Clause No. of	Page	Content of EOI	Change Requested/ Clarification required
	Eol Document	No.	Requiring Clarification	
33		40	The RIS should have provision for easy integration with the third-party system through APIs based integrations	Please list down the third party systems which are being considered for integration
34		40	Development of comprehensive internal and external dynamic Dashboard using data analytics for all the non-spatial data available.	Please confirm does external means agencies or citizens?
35		40	The proposed system shall have robust data pipelines and data access capabilities to extract and standardize the data from siloed systems like Databases, Excel, Flat Files and ERP systems, collected from the different entities	It is assumed that Flat files pertain to GIS System like shapefiles, kmls and geodatabase.
36		41	The Integrated GIS application shall be accessed by Authority staff within the MMRDA and Other government entities (ULBs, Police, PWD, Health, Education, Transport, power supply etc.) and Citizen users (approx. 100 authority users for viewing GIS data simultaneously and 50 authority users for editing GIS simultaneously and multiple Citizens Internet Users).	It is assumed that multiple citizen users would be viewers and will not be given editing access on GIS
37		41	The Applicant shall ensure the GIS integration with existing and proposed systems like, SCADA Systems, Property Tax, BPAS, e Office, PAP system, surveillance, Traffic management system, etc. at application level. The level of integration with the selected existing systems shall be assessed by vendor during the system study.	Kindly explain what is BPAS and PAP system?

MMRDA's response/ Clarification
Shall be part of DPR to be submitted by SI after awarding of the contract.
Citizens.
Flat files may include spatial (non-GIS) and non- spatial formats.
Yes.
BPAS : Building Plan Approval System. Kindly ignore PAP system.

S. No.	Clause No. of Eol Document	Page No.	Content of EOI Requiring Clarification	Change Requested/ Clarification required
38			Suggestion	<ul> <li>No information has been provided with regards to GIS platform to be used for this prestigious project of MMRDA. We suggest that MMRDA should have a robust COTS platform for this project which has been already tried and tested not only in India but worldwide. We suggest to consider some of the following key features for the platform:-</li> <li>1. Platform should be COTS Platform.</li> <li>2. Platform should be capable of maintaining data history, version management and conflict detection.</li> <li>3. Platform should have the feature to create web applications using template or wizard. It should support adding widgets and create dynamic dashboards which can easily be configured minimising customisation.</li> <li>4. Platform should support Tile layer from Vector and Raster layers for better performance and fast accessibility</li> <li>5. System tools can analyze patterns and aggregate data in the context of both space and time -Space-time (spatiotemporal) analysis</li> <li>6. GIS system should have a portal for administration that lets administrators to add, update, manage and maintain city GIS data and user management, Content Sharing and capability to build various GIS applications</li> <li>7. The platform should handle 2D and 3D data simultaneously along with advanced raster and image analysis workflows using machine learning/Artificial Intelligence for feature extraction etc.</li> </ul>
39			Clarification	Request you to kindly confirm whether the RIS platform has to be Active-Active mode or Active-Passive Mode

quired	MMRDA's response/ Clarification
to GIS platform A. We suggest rm for this not only in India the following	Shall be part of DPR to be submitted by SI after awarding of the contract.
ta history,	
b applications ng widgets and configured	
r and Raster ity gate data in the atiotemporal)	
ration that lets ntain city GIS nd capability to	
multaneously workflows using e extraction etc.	
latform has to	Shall be part of DPR to be submitted by SI after awarding of the contract.

S. No.	Clause No. of	Page	Content of EOI	Change Requested/ Clarification required	MMRDA's respo
40	Eol Document         Schedule II: Qualification Criteria & Form         2.1: Performance Capability Statement	No. 45 & 61	Requiring ClarificationSchedule II: Qualification CriteriaCriteria 1 General and SimilarExperience:i) Applicants must have at least 5years' experience in ConsultancyServices, and must haveDuring the last 5 years, at least 3Consultancy Assignments completedor substantially completed (at least90% payments received) out of which,at least 1 should be similar projecthaving consultancy fee not less thanINR 25 Lakhs.Form2.1: Performance CapabilityStatement Note:a. Project shall be either complete orongoing in the last ten yearsfrom thelast date of proposal submissionCapability Statement Note:a. Project shall be either complete orongoing in the last ten years from thelast date of proposal submissionCapability Statement Note:a. Project shall be either complete orongoing in the last ten years from thelast date of proposal submission	<ul> <li>Please refer page no. 61 of 101, which states that "Form 2.1.1: Project Citation Format, "Note: a) Project shall be either complete or ongoing in the last ten years from the last date of proposal submission"".</li> <li>We understand that the, "applicant must have at least 5 years' experience in consultancy services, and must have <u>during the</u> last 10 years, instead of 5 years, at least 3"</li> <li>Kindly, consider/confirm 'during the last 10 (ten) years"</li> </ul>	Refer to Schedule II
41	Description of project	39	The Broad Scope of Services is as mentioned below: i) Data Collection/ Creation of comprehensive RIS database a. <u>Create a detailed common GIS</u> <u>base map in consultation with</u> MMRDA.	Please elaborate on requirement, <u>how to create a detailed</u> common GIS base map in consultation with MMRDA?	Shall be part of DPR after awarding of the
42	Schedule I: Terms of Reference (TOR)	39	Description of Services: Estimated time frame to achieve above is of 5 years.	Is the 5 years period including Implementation and O&M? As mentioned in iv) Setting up Urban observatory within MMRDA premises point# c), post implementation support for 5 years is expected. Please clarify the implementation and O&M period?	To be further detaile after studying Eol re
43	Schedule I: Terms of Reference (TOR)	40	iii) Dynamic Dashboard/ Analytics system: c) The analytics visualization system shall be providing the web based secured role- based access to multiple stakeholders/ departments. It shall also support the mobility feature on mobile and tablet for executives.	Are we supposed to develop native application, or the application should be supported by mobile browser? if native application is the requirement than do specify the platform, IoS or Android or both?	IoS, Anroid, Mac and

cation required	MMRDA's response/ Clarification
states that ''Form 2.1.1: ect shall be either <b>ars</b> from the last date of	Refer to Schedule II, Criteria 1 (i).
st have at least 5 years' d must have <u> <b>during the</b></u> ast 3"	
last 10 (ten) years"	
to create a detailed ion with MMRDA?	Shall be part of DPR to be submitted by SI after awarding of the contract.
entation and O&M? As ervatory within MMRDA n support for 5 years is ation and O&M period?	To be further detailed out at RFP stage after studying Eol responses.
plication, or the bile browser? if native specify the platform, IoS	IoS, Anroid, Mac and Windows.

S. No.	Clause No. of	Page	Content of EOI	Change Requested/ Clarification required
	Eol Document	No.	Requiring Clarification	
44	Schedule I: Terms of Reference (TOR)	40	iii) Dynamic Dashboard/ Analytics system: f) It shall be scalable in nature and should be flexible to deploy on- premises or in cloud environment.	Infrastructure to be provided by MMRDA. Please clarify w.r.t point# e. of vi) General Requirements
45	General		General	Any existing GIS system in place? are we supposed to extend the same?
46	General		General	Any specific choice of technology for the solution e.g., ESRI, open source etc., even clarifies for windows or Java a solution platform.
47	Important Dates -Last Date of online submission	10	26/12/2022 17.00 hrs (IST)	Please give at least 21 days' time after the arrival of pre bid corrigendum for the submission of bid
48	Schedule II: Qualification Criteria	45	Similar Assignments for Qualification Criteria would be:The Applicants shall have experience acting as a System Integrator role for GIS and data analytics implementation.	We request you to kindly rephrase the clause as follow - Similar Assignments for Qualification Criteria would be: The Applicants shall have experience acting as a System Integrator / Consultant/ PMU role for Projects with GIS and data analytics implementation as component.
49	Schedule II: Qualification Criteria	45	Criteria 1 General and Similar Experience : i) Applicants must have at least 5 years' experience in Consultancy Services, and must have during the last 5 years, at least 3 Consultancy Assignments completed or substantially completed (at least 90% payments received) out of which, at least 1 should be similar project having consultancy fee not less than INR 25 Lakhs. ii) Consultancy Assignments mentioned above should be similar assignments of acting as a System Integrator role for GIS and data analytics implementation.	We request you to kindly rephrase the clause as follow - i) Applicants must have at least 5 years' experience in Consultancy Services, and must have During the last 5 years, at least 3 Consultancy Assignments completed or substantially completed (at least 90% payments received) out of which, at least 1 should be similar project having consultancy fee not less than INR 25 Lakhs. ii) Consultancy Assignments mentioned above should be similar assignments of acting as a System Integrator / Consultant / PMU role for Projects with GIS and data analytics implementation as component.

	MMRDA's response/ Clarification
	Shall be part of DPR to be submitted by SI after awarding of the contract.
	No.
	No.
	Refer to Corrigendum - I.
•	Not to be considered.
ıt	Not to be considered.
5	
r	

S. No.	Clause No. of	Page	Content of EOI	Change Requested/ Clarification required
	Eol Document	No.	Requiring Clarification	
50	Schedule II: Qualification Criteria	45 & 46	Note to Applicant: 2) If a joint venture or other association submits the bid. In that case, all parties in the Joint Venture/ Consortium must submit their financial statements, in order of the partner's significance in the partnership,	<ol> <li>Requesting you to allow and accept 'Unincorporated Joint Venture (JV)'</li> <li>Query for the below clause- the Lead member must meet at least 40 percent of those minimum criteria for an individual Bidder and other members at least 25% of the criteria. We are assuming that in case of JV/C by 2 Members, 1st member can provide compliance for the 2 clauses and 2nd Member can provide compliance for remining 1 clause out of three clauses as mentioned in Schedule II: Qualification Criteria</li> <li>Kindly Confirm</li> </ol>
51	Form 2.4.4	73	Summary of Information on Proposed Experts/ Team of Key Resources Length of Service with the Firm	We request you to clarify on following – 1) Do we have to provide the list of SMEs not necessarily deployable on the project or only the ones which will be deployed on the project 2)SI may have to hire new talent for this project hence request you to remove a column "Length of Service with the Firm" from table 'Summary of Information on Proposed Experts/ Team of Key Resources' Kindly Confirm
52	3. Description of Services	39	The Broad Scope of Services is as mentioned below: i) Data Collection/ Creation of comprehensive RIS databased. To migrate the data to GIS platform and overlay on base map to create the comprehensive GIS database.	From requirement we understood following - For GIS data overlay critical aspect is the coordinate system, data accuracy and data digitization aspect ratio. Hence, respective department / agencies which were mentioned in the EOI-Annexure 1 shall provide the required GIS data as per the standards of proposed New GIS system. Kindly confirm

	MMRDA's response/ Clarification
S	Not to be considered.
	As this is EoI stage, MMRDA requires to know the profile of expertise available as of now with the participants and requested to comply with the EoI document requisite.
	The data to be collected will be in spatial (non-GIS) and non- spatial formats (digital/ non-digital) which has to be migrated to GIS environment as per GIS data model developed by SI and overlayed on base map. All the required task to migrate and overlay data on basemap has to be done.

S. No.	Clause No. of	Page	Content of EOI	Change Requested/ Clarification required
	Eol Document	No.	Requiring Clarification	
53	3. Description of Services	39	The Broad Scope of Services is as mentioned below: ii) Design, Develop and Implement Integrated RIS Platform b. Design and develop applications for accessing RIS Platform on smart phone and tablets. d. The system should be optimized for access on multiple types of devices i.e., computers, tablets and mobile	From the requirement we understood following - MMRDA is expecting a dedicated mobile application and Web Application which can work on different Mobile OS and different Desktop OS according to their form factor. Kindly Confirm
54	3. Description of Services	40	The Broad Scope of Services is as mentioned below: ii) Design, Develop and Implement Integrated RIS Platformf. The proposed system shall provide a provision for integrating the live feed data (audio/ visual data, dynamic data i.e., traffic, CCTV, Rainfall data and temperature data, etc.) generated from MMRDA or the external agencies, to the RIS database and further to RIS dashboard as and when required. g. The RIS should have provision for easy integration with the third-party system through APIs based integrations.	From the requirement we understood following - Respective vendor for the external system will coordinate with shortlisted bidder for Proposed system for - fetch data from the external system for required integration and also vice versa for sharing required data to external systems Shortlisted bidder for Proposed system will only expose standard data sharing API. Kindly Confirm.
55	3. Description of Services	40	The Broad Scope of Services is as mentioned below: iii) Dynamic Dashboard/ Analytics systema. Development of comprehensive internal and external dynamic Dashboard using data analytics for all the non-spatial data available.	Does Citizens will also have access to this Dashboard / Analytics system? Kindly confirm.
56	GENRAL-1			Requesting to provide details of the existing GIS & RS setup at MMRDA. Does MMRDA expecting existing setup to be enhanced as per the requirement of this EOI? Does MMRDA expecting a platform which is already tested for similar requirement in India and across the world?

required	MMRDA's response/ Clarification
g - cation and Web OS and different	Yes. Shall be part of DPR to be submitted by SI for Design of RIS after awarding of the contract.
coordinate with coordinate with ch data from the so vice versa for rtlisted bidder for ta sharing API.	Shall be part of DPR to be submitted by SI after awarding of the contract.
shboard /	Yes. Data/ dashboard viewing access.
IS & RS setup at	No such specific system available with MMRDA.
enhanced as per	No.
lready tested for rld?	No. To be part of the DPR to be submitted by SI for Design of RIS after awarding of the contract.

S. No.	Clause No. of Eol Document	Page No.	Content of EOI Requiring Clarification	Change Requested/ Clarification required	
57	GENRAL-2			<ul> <li>Suggesting adding following key platform related functionalities in the EOI -</li> <li>1. Platform should be COTS Platform.</li> <li>2. Platform should be capable of maintaining data history, version management and conflict detection.</li> <li>3. Platform should have the feature to create web applications using template or wizard. It should support adding widgets and create dynamic dashboards which can easily be configured minimising customisation.</li> <li>4. Platform should support Tile layer from Vector and Raster layers for better performance and fast accessibility</li> <li>5. System tools can analyze patterns and aggregate data in the context of both space and time -Space-time (spatiotemporal) analysis</li> <li>6. GIS system should have a portal for administration that lets administrators to add, update, manage and maintain city GIS data and user management, Content Sharing and capability to build various GIS applications</li> <li>7. The platform should handle 2D and 3D data simultaneously along with advanced raster and image analysis workflows using machine learning/Artificial Intelligence for feature extraction etc.</li> </ul>	SI af
58	EOI Submission Formats Form 2.4.3:	71	Form 2.4.3: Curriculum Vitae (CV) Format	Position, Qualification and Experience not mentioned in EOI document. Kindly clarify.	R
59	General	37	Physical submission of Originals/ Self- attested copies of Originals of Scanned Documents uploaded (Clause 8.3)		N
60	1	34	Product category: Consultancy	Title of the EOI mentions "Selection of System Integrator (SI)", Please clarify if this EOI is for selection of consultancy firm or System Integrator.	TI In S in
61	Schedule II Point i)	45	Applicants must have at least 5 years' experience in Consultancy Services	Title of the EOI mentions "Selection of System Integrator (SI)", Please clarify if this EOI is for selection of consultancy firm or System Integrator.	TI In S in
62	Form 2.4 Chapter 5	69	Overall implementation strategy, Team Deployment Plan, Work and Project Plan with illustrations, time schedule and cost for completion of projects, supported with details of services that will be provided.	Please clarify if the plan to be shared is from the perspective of a consultant or System integrator.	S In
63	Form 2.4 Chapter 5	69	Brief on the conceptual plan and the applicants understanding of the project which will include over cost estimation along with references.	Please clarify if the plan and costing to be shared is from the perspective of a consultant or System integrator.	S In

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S	Shall be part of DPR to be submitted by SI after awarding of the contract.
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)", or	The EoI is for the selection of System Integrator. SI will be designing, developing and implementing the RIS.
)", or	The EoI is for the selection of System Integrator. SI will be designing, developing and implementing the RIS.
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	System Integrator. SI will be designing, developing and implementing the RIS.

S. No.	Clause No. of	Page	Content of EOI	Change Requested/ Clarification required	MMRDA's response/ Clarification
	Eol Document	No.	Requiring Clarification		
64	Schedule 1	39	Estimated time frame to achieve is of 5 years.	Our understanding is MMRDA shall facilitate in providing the data from the listed entities/ external agencies while SI is only responsible to standardize the data received and create the database.	MMRDA will co-ordinate with the agencies for the necessery permission for data collection.The SI is expected to submit a detailed list of data from agencies and methodology to collect the data and create a standardized data model for continuous data retrieval. Further, all the required task to migrate and overlay data on basemap has to be done by SI (to the extent possible, based on discussion and instructions from MMRDA).
65	Schedule 1 - 3. Description of Services	40	Design, Develop and Implement Integrated RIS Platform - The proposed system shall provide a provision for integrating the live feed data (audio/ visual data, dynamic data i.e., traffic, CCTV, Rainfall data and temperature data, etc.) generated from MMRDA or the external agencies, to the RIS database and further to RIS dashboard as and when required.	Please provide the list of external agencies Our understanding is MMRDA shall facilitate in providing the data from the listed entities/ external agencies while SI is only responsible to standardize the data received and create the database	The tentative list of data and the government agencies is provided in Annexure - 1 of EoI document. MMRDA will co-ordinate with the agencies for the necessery permission for data collection. The SI is expected to submit a detailed list of data from agencies and methodology to collect the data and create a standardized data model for continuous data retrieval. Further, all the required task to migrate and overlay data on basemap has to be done (to the extent possible, based on discussion and instructions from MMRDA).
66	Schedule 1 - 3. Description of Services	40	Design, Develop and Implement Integrated RIS Platform - The RIS should have provision for easy integration with the third-party system through APIs based integrations	How many API based integrations with third party systems are expected? We understand that all necessary APIs shall be provided by MMRDA to create the RIS platform. Kindly confirm	Shall be part of DPR to be submitted by SI after awarding of the contract. MMRDA will co-ordinate with the agencies for the necessery permission for sharing of APIs.
67	Schedule 1 - 3. Description of Services	40	Setting up Urban observatory within MMRDA premises- Post implementation support for minimum 5 years involving additional customizations to the Geo Portal and Dashboards.	Kindly clarify when does post implementation phase start Once FRS is finalized, any further customizations should go under change management. Please confirm	To be further detailed out at RFP stage after studying EoI responses.
68		40 -41	<b>Operation and maintenance (O&amp;M) -</b> Training	Kindly specify training to how many staff is expected? And Approx. how many times on-site training shall be expected in the tenure?	Shall be part of DPR to be submitted by SI after awarding of the contract.

S. No.	Clause No. of	Page	Content of EOI	Change Requested/ Clarification required	
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69	Schedule 1 - 3. Description of Services	41	<b>General Requirements</b> - The level of integration with the selected existing systems shall be assessed by vendor during the system study.	Kindly provide total number of existing systems to be integrated along with their technical details	0 0
70	Schedule 1 - 3.1	42	Tentative Deliverables - Onboarding of external agencies	Please provide the list of external agencies Our understanding is MMRDA shall facilitate in providing the data from the listed entities/ external agencies while SI is only responsible to standardize the data received and create the database	T G A N f C C d n a d F a d
71	Schedule 1 - 3.2	43	Tentative workflow for implementation of the project	Understanding is Administrative approval from entities/ external agencies and required support for integration from these entities/ external agencies will be provided by MMRDA. Kindly confirm.	Y
72	10.2.4 - Presentations	30	After examining the EOI, some or all the Applicants <b>may be asked to make</b> <b>presentations</b> explaining their understanding of the project, methodology, etc.	Kindly confirm if the the applicants are required to make the presentation.	F ()
73	Schedule 1 - 5	44	Based on the responses submitted, all the Applicants shall be required to make presentation of their EOI response to confirm their understanding of the project and MMRDA's requirement.		
74	Schedule 1 - 6	44	The applicant has to perform any activities /task as asked by MMRDA from time to time within the scope of this study.	Once FRS is finalized, any further customizations should go under change management. Please confirm.	T a

	MMRDA's response/ Clarification
d	Shall be part of DPR to be submitted by SI after awarding of the contract.
	The tentative list of data and the government agencies is provided in Annexure - 1 of Eol document.
	MMRDA will co-ordinate with the agencies for the necessery permission for data collection. The SI is expected to submit a detailed list of data from agencies and methodology to collect the data and create a standardized data model for continuous data retrieval.
	Further, all the required task to migrate and overlay data on basemap has to be done (to the extent possible, based on discussion and instructions from MMRDA).
	Yes.
	Please Refer Clause No. 10.2.4 (page 30).
	To be further detailed out at RFP stage after studying Eol responses.

S. No.	Clause No. of	Page	Content of EOI	Change Requested/ Clarification required	MMRDA's response
	Eol Document	No.	Requiring Clarification		
75	Schedule II: Qualification Criteria	46	Criteria 3 - Financial Capability Minimum average annual turnover of at least Rs. 1 Crore, at least 25% of which should be from Consultancy Service Contracts, calculated as total certified payments received for contracts in progress or completed within the last 5 years	Kindly revise the clause to Criteria 3 - Financial Capability Minimum average annual turnover of at least Rs. 50 Crore, at least 25% of which should be from Consultancy Service Contracts, calculated as total certified payments received for contracts in progress or completed within the last 5 years.	Not to be considered.
76	Section 3: Description of Services: (i)Data Collection	39	b. To migrate the data to GIS platform and overlay on base map to create the comprehensive GIS database	Requesting for clarification on whether historical data migration has to be done.	Historical data to the ext running of RIS need to b further detailed out at RF studying Eol responses.
77	Section 3: Description of Services: (ii) Design, Develop and Implement Integrated RIS Platform	39	a. Design and development of Web GIS based solution for visualization of Spatial data with its attributes	Kindly let us know if there is any preference of using COTs product or open-source visualization tool for the solutioning	Shall be part of DPR to be after awarding of the cor
78	Section 3: Description of Services: (ii) Design, Develop and Implement Integrated RIS Platform	39	c. The Applicant shall design and implement an interactive portal interface webpage which will contains link to RIS platform (geo-portal, dashboards, etc.).	Kindly let us know the tentative number of user dashboards to be developed.	Shall be part of DPR to be after awarding of the cor
79	Section 3: Description of Services: (i)Data Collection	39	a. Collect the data and facilitate the data pipeline	Kindly let us know what are the data sources from which data need to be captured/collected.	The tentative list of data government agencies is Annexure - 1 of Eol docu
80	Section 3: Description of Services: (ii) Design, Develop and Implement Integrated RIS Platform	40	provision for integrating the live feed	It is evident that unstructured data need to be analysed in the system. Kindly let us know the tentative volume of such data to be analysed and also the frequency at which the data to be analysed	Volume of the data depe of the activity of the ager Frequency is variable fro agency.
81	Manpower Requirement	General Query		Is there any preferred requirement of manpower to be deployed for the assignment (as per the scope)?	Shall be part of DPR to k after awarding of the cor
82		General Query		Is it mandatory for the qualified EOI bidder to participate in RFP to be published.	No.
83	Schedule II: Qualification Criteria	45	The Applicants shall have experience acting as a System Integrator role for GIS and data analytics implementation.	Please modify as: The Applicants shall have experience acting as a System Integrator role for GIS OR data analytics implementation.	Not to be considered.
84	Schedule II: Qualification Criteria	45	Criteria 1 - General and Similar Experience: i) Applicants must have at least 5 years' experience in	Please modify as: Applicants must have at least 3 years' experience in Implementation / Consultancy Services, and must have during the last 3 years, at least 3 Implementation / Consultancy Assignments completed or substantially completed	

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pability 0 Crore, at crvice ceived for years.	Not to be considered.
ata migration	Historical data to the extent for smooth running of RIS need to be migrated. To be further detailed out at RFP stage after studying Eol responses.
g COTs lutioning	Shall be part of DPR to be submitted by SI after awarding of the contract.
shboards to	Shall be part of DPR to be submitted by SI after awarding of the contract.
which data	The tentative list of data and the government agencies is provided in Annexure - 1 of EoI document.
ysed in the such data to ata to be	Volume of the data depend on the nature of the activity of the agency. Frequency is variable from agency to agency.
be deployed	Shall be part of DPR to be submitted by SI after awarding of the contract.
ipate in RFP	No.
ience acting ics	Not to be considered.
years' es, and must tion / lly completed	Not to be considered.

S. No.	Clause No. of	Page	Content of EOI	Change Requested/ Clarification required	MMRDA's respo
	Eol Document	No.	Requiring Clarification		
85				(at least 90% payments received) out of which, at least 1 should be similar project having value not less than INR 25 Lakhs.	
86			during the last 5 years, at least 3 Consultancy Assignments completed or substantially completed (at least 90% payments received) out of which , at least 1 should be similar project having consultancy fee not less than INR 25 Lakhs.		
87	Schedule II: Qualification Criteria	45	<ul> <li>ii) Consultancy Assignments</li> <li>mentioned above should be similar</li> <li>assignments of acting as a System</li> <li>Integrator role for GIS and data</li> <li>analytics implementation.</li> </ul>	Please modify as: Consultancy Assignments mentioned above should be similar assignments of acting as a System Integrator role for GIS OR data analytics implementation.	Not to be considered
88	Schedule II: Qualification Criteria	46	<b>Criteria 3 - Financial Capability</b> <b>Turnover:</b> Minimum average annual turnover of at least Rs. 1 Crore, at least 25% of which should be from Consultancy Service Contracts, calculated as total certified payments received for contracts in progress or completed within the last 5 years.,	Please modify as: Turnover: Minimum average annual turnover of at least Rs. 100 Crore, at least 25% of which should be from Implementation / Consultancy Service Contracts, calculated as total certified payments received for contracts in progress or completed within the last 5 years.	Not to be considered
89	e-EOI Notice	5 of 101	Submission of EOI: 26.12.2022	Since the Christmas holidays are approaching, hence we request to extend the submission date by three weeks i.e. until 16th Jan. 2023 .	Refer to Corrigendun
90	S.no. 2)of 'Note to Applicant' to Schedule II: Qualification Criteria	46 & 47 of 101	II: Qualification Criteria, which mentions "however, for a JV/C to qualify, the Lead member must meet at least 40 percent of those minimum criteria for an individual Bidder and other members at least 25% of the criteria. Failure to comply with this	It is to mention that purpose of forming a joint venture (JV) does not hold importance if a partner qualifies. Hence we request you to withdraw criteria in regard to each member qualifying given criteria.Please consider to amend as below:"however, for a JV/C to qualify, the Lead member must meet at least 40 percent of those minimum criteria for an individual Bidder.Failure to comply with this requirement shall result in the rejection of the JV/C's bid".	

required	MMRDA's response/ Clarification
h, at least 1 should NR 25 Lakhs.	
mentioned above System Integrator n.	Not to be considered.
e annual turnover ch should be from icts, calculated as s in progress or	Not to be considered.
g, hence we ee weeks i.e. until	Refer to Corrigendum - I.
venture (JV) does	Not to be considered.
regard to each ider to amend as Lead member must iteria for an equirement shall	

S. No.	Clause No. of Eol Document	Page No.	Content of EOI Requiring Clarification	Change Requested/ Clarification required	MMRDA's response/ Clarification
91				We are very keen to participate in this EoI and would like to request to the Dept for extension of 4 weeks. This is required for studying the requirement and scrutiny by TCS internal legal, finance, IPR teams etc.	Refer to Corrigendum - I.