

BRIHANMUMBAI MUNICIPAL CORPORATION
(Sewerage Operation Department)

Sub: Invitation of Expression of Interest (EOI) for finalization of Qualifying Technology/ies for Condition Assessment of Sewer Rising Mains/ Sewer Pressure Mains in Mumbai.

Minutes of Pre-EOI Meeting held on 07.07.2026 and Reply to the Queries Received

Pre-EOI meeting for the subject work was held on 07.07.2026 at 02:00 PM under the chairmanship of Ch.E.(S.O.) at 2nd Floor Conference Hall, Engineering Hub Building, Dr. E'Mozes Marg, Worli, Mumbai - 400 018. Following BMC Engineers were present.

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|------------------------------|---|--------------------|
| 1. Shri. Prachiti M. Desai | - | Ch.E.(S.O.) |
| 2. Shri. Salil A. Garude | - | Dy.Ch.E.(S.O.) P&C |
| 3. Shri. Gajanan G. Machewad | - | Ex.Eng.(S.O.) P&C |
| 4. Shri. Vaibhav A. Deshmukh | - | A.E.(S.O.) P&C-I |

The prospective applicants/ participants present at the meeting are listed in Attendance Sheet attached herewith.

At the outset, Ch.E.(S.O.) welcomed all the prospective applicants/ participants to the pre-EOI meeting and encouraged the participants to seek clarifications and ask questions, if any. Ch.E.(S.O.) also requested the prospective applicants to submit their queries raised during the meeting in written communication to seek clarifications.

The queries received via emails, correspondence and during the pre-EOI meeting are reproduced below along with the answers / decision taken.

Sr. No	Name of the Firm	EOI Clause Reference	Provision in EOI Clause	Query Raised	Decision Taken	Remarks/Clarification
1.	M/s. TTI Consulting Engineers India Pvt Ltd	4.Eligibility Criteria for participating in EOI - 4.3 Experience -(ii)	"The participant must have carried out condition assessment of at least 10 Kms having a dia. range from 250 mm to 3000 mm Sewer Pressure Mains/ Sewer Rising Mains/ Gravity Sewers/ Sewer Pipelines/ Water Pipelines with the technology/ies proposed by them during last Seven (07) years."	It is requested that the diameter range specified for the 10 km condition assessment experience criteria be relaxed to "250 mm to 1400 mm", i.e., experience of condition assessment works executed within the 250 mm to 2200 mm dia. range may be considered fully compliant with Clause 4.3(ii), without requiring specific project references in the 2201 mm to 3000 mm dia. band.	EOI condition prevails.	The eligibility criterion of experience in pipeline diameters ranging from 250 mm to 3000 mm has been prescribed considering the wide range of rising mains under BMC jurisdiction.
2.	M/s. TTI Consulting Engineers India Pvt Ltd	4.Eligibility Criteria for participating in EOI - 4.3 Experience -(i)	"The participant shall have a minimum of Seven (07) years' experience (domestic as well as global) in the field of condition assessment of Sewer Pressure Mains / Sewer Rising Mains / Gravity Sewers / Sewer Pipelines / Water Pipelines."	If we are the authorised Indian partner, licensee, or representative of a technology OEM, can the OEM's own experience and track record be used to meet this criterion, rather than only ours?	Please refer Corrigendum-II in this regard. Authorized representative of OEM shall be added to the list of eligible Entities Clause No. 4.1 (ii).	Yes, the participant can use the experience and credentials of the Original Equipment Manufacturer (OEM)/ Parent Company only for deciding the technology/ies for condition assessment, provided the participant submits valid authorization, technology licensing agreement and MOU from the OEM/Parent Company confirming technological support.

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3.	M/s. TTI Consulting Engineers India Pvt Ltd	6. Disqualifications (iii), And Annexure -I - 2.2 - GIS & Asset Mapping Integration	"...if the technology/ies proposed offers Limited Integration with BMC GIS System or the output visualization and analysis requires specialized proprietary software." / "Limited mapping integration/ output visualization and analysis requiring specialized proprietary and commercial software: Disqualification"	Can we still qualify if we use proprietary software internally, as long as the final data is delivered in open, usable formats such as CSV, XLSX, Shapefile, GeoJSON or PDF?	EOI condition prevails.	It may be clarified here that BMC shall not be dependent upon proprietary commercial software in any form for viewing, analyzing, referring or utilizing the submitted data. As far as qualification process is concerned, it is totally dependent on the merits of submission and marks acquired by them through it.
4.	M/s. TTI Consulting Engineers India Pvt Ltd	Proforma-I, Part C : Defect Detection Capabilities - C4	"Can the technology map external soil voids or bedding failures adjacent to the pipeline?"	If our technology doesn't detect external soil voids or bedding failures (that typically needs GPR, a different technology altogether), can we still qualify as long as we meet all the mandatory Tier-1 requirements under Clause 7.4?	EOI condition prevails.	Detection of external soil voids or bedding failures may be an added feature of the technology proposed by the participant and the same will be evaluated as per directions and guidelines of TAC. As far as qualification process is concerned, it is totally dependent on the merits of the submission and marks acquired by them through it.

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5.	M/s. TTI Consulting Engineers India Pvt Ltd	13. Demonstration Requirement	"The Condition Assessment Technology/ies fulfilling eligibility criteria and Evaluation Matrix will be called for presentation and field demonstration before TAC. The schedule of the same will be communicated at later stage."	Could BMC please provide the details of the proposed demonstration pipeline in advance, including pipe diameter, material, length, operating pressure, flow conditions, access points, and shutdown availability? Further, where mobilization of specialized equipment from overseas is not feasible solely for the demonstration, would BMC consider accepting validated project data, reports, or recorded demonstrations from previous deployments as an alternative to a live demonstration?"	EOI condition prevails.	Live demonstration before TAC is mandatory. The demonstration pipeline, schedule and operational details shall be communicated only to shortlisted participants after completion of EOI evaluation. The query asked is divided in two parts, the answers of which are as below: Provision of pipeline for demo in advance: At this juncture, it will be inappropriate to give the details asked in the queries such as pipe diameter, material, length, operating pressure, flow conditions, access points, and shutdown availability. Acceptance of validated data from previous deployments as an alternative to live demonstration: Previous project reports or recorded demonstrations may be considered only as supporting documents and shall not substitute the live demonstration.

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6.	M/s. TTI Consulting Engineers India Pvt Ltd	1. Introduction And Annexure -I - 1.1 - Diameter Compatibility	"...size ranging from 250 mm dia. to 3000 mm dia..." and Scoring criteria for size compatibility (p. 16).	Kindly clarify if individual technology systems must span the entire 250mm to 3000mm range to qualify, or if bidders can propose a combination of specialized tools for different diameter bands.	EOI condition prevails.	It is not necessary that individual technology system must span the entire 250 mm dia. to 3000 mm dia. range to qualify. Participants may propose a combination of technologies and specialized tools to cover the specified diameter range. The proposed technology package shall collectively satisfy the stated requirements and the evaluation shall be carried out accordingly.
7.	M/s. TTI Consulting Engineers India Pvt Ltd	3: Scope of Work - iii. Section C - Operational Methodology & Safety Compliance And Proforma-I, Part B : Operational Constraints & Safety - B1	"Flow Disturbance Profile... Zero-Shutdown (fully online) or requires partial pumping restrictions..." (pp. 5, 14)	PI confirm availability of stable, non-turbulent pumping velocities and consistent full-bore flow profiles during the inline sensor deployment windows.	EOI condition prevails.	BMC cannot guarantee stable, non-turbulent pumping velocities and consistent full-bore flow profiles. The participant will have to suggest technologies which are compliant with the actual working conditions of the BMC. The participants shall get acquainted with the actual working conditions of BMC before submission of EOI.

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8.	M/s. TTI Consulting Engineers India Pvt Ltd	Annexure -I - 1.4 - Access Pit Requirement	"Access Pit Requirement: 2 access point / sample length of 500 meter. Or more: 10 Points" (p. 17).	How the points will be awarded in case of non-disruptive inline technologies that can inspect more than 1000 to 2000+ meters through a single insertion point without building new intermediate access pits?	EOI condition prevails.	EOI evaluation matrix and marking system is self-explanatory.
9.	M/s. TTI Consulting Engineers India Pvt Ltd	3: Scope of Work - ii. Section B - Data Capture & Accuracy Metrics And Annexure -I - 1.6 & 2.1	"Detection Capabilities: wall thinning (metal loss)... silt accumulation... sub-metre accuracy." (pp. 5, 17)	For sensor-based systems operating in live pipelines, can BMC confirm that localized silt accumulation will be cleared or flushed out prior to the inspection run?	EOI condition prevails.	No. If the proposed technology demands flushing of accumulated Silt that changes the prevailing condition of the sewer rising mains and hence, the query cannot be accepted.
10.	M/s. TTI Consulting Engineers India Pvt Ltd	3: Scope of Work - iii. Section C - And Proforma-I, Part B : Operational Constraints & Safety - B4	"Risk & Safety Protocols... contingency plans for tool retrieval if a device gets stuck inline." (pp. 5, 14)	In the rare event that an inline tool gets structurally wedged, will BMC provide immediate isolation, bypassing, and emergency structural excavation support to facilitate tool retrieval?	EOI condition prevails.	Preparation and operation of a comprehensive tool retrieval methodology and contingency plan shall remain the responsibility of the participant.

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11.	M/s. TTI Consulting Engineers India Pvt Ltd	4. Eligibility Criteria for participating in EOI, 4.3) Experience, Clause (ii)	"The participant must have carried out condition assessment of at least 10 Kms having a dia. range from 250 mm to 3000 mm Sewer Pressure Mains/ Sewer Rising Mains/ Gravity Sewers/ Sewer Pipelines/ Water Pipelines with the technology/ies proposed by them during last Seven (07) years."	Kindly clarify whether experience gained from inspecting pressurized clean water transmission lines of identical materials and diameters will be considered fully equivalent to sewer rising mains.	EOI condition prevails.	EOI Clause is self-explanatory.
12.	M/s. TTI Consulting Engineers India Pvt Ltd	8. Data & Deliverable Requirements - 8.3	"Note: The GIS Dataset shall be based on the Geo-Referencing Base Stations of SO Dept., BMC."	Will BMC provide bidders with the baseline coordinates, network schemas, and projection parameters of its internal GIS base stations at the time of project award?	EOI condition prevails.	Relevant GIS reference system and projection parameters required for execution shall be provided to the successful participant at the execution stage, wherever applicable.
13.	M/s. TTI Consulting Engineers India Pvt Ltd	9. Defect Coding Standards	"Disqualification criterion (revised): Proprietary non-documented internal logging methodology with no reference to any published national or international standard. Participants using their own condition grading framework must demonstrate its equivalence to a recognised standard."	Confirm that custom-engineered sensor software outputs are acceptable, provided they map their raw wall-loss percentages directly to ASME B31G or AWWA M77 structural remnants (p. 11).	EOI condition prevails.	Custom-developed sensor software is acceptable provided the resulting condition assessment and defect grading are traceable to recognized international standards such as ASME B31G, AWWA M77, ISO standards or equivalent, as stipulated in Clause 9.

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14.	M/s. Virgo Specialties	4. Eligibility Criteria for participating in EOI, 4.3) Experience, Clause (i)	The participant shall have a minimum of Seven (07) years' experience (domestic as well as global) in the field of Condition Assessment of Sewer Pressure Mains/Sewer Rising Mains/ Gravity Sewers/Sewer Pipelines/Water Pipelines	The clause, 4.3) Experience, Clause (ii) is self-sufficient. Hence, the clause 4.3) Experience, Clause (i) is redundant.	Please refer Corrigendum-II in this regard.	The EOI Clause 4.3) Experience, Clause (i) -Deleted . And 4.3) Experience, Clause (ii) revised and read as: “The participant must have successfully carried out and completed condition assessment of at least 10 Kms having a dia. range from 250 mm to 3000 mm Sewer Pressure Mains / Sewer Rising Mains / Gravity Sewers / Sewer Pipelines / Water Pipelines with the technology/ies proposed by them during last Seven (07) years (domestic as well as global). ”
15.	M/s N K Shah Infraprojects	EOI Notice: Last date of Submission of EOI	To grant an extension of one month for the submission of EOI.	Last date of Submission of EOI: 16.07.2026 till 17:00 Hrs.	Please refer Corrigendum-I in this regard	Revised - last date of Submission of EOI: 31.07.2026 till 17:00 Hrs.

Sd/-
Shri. Gajanan G. Machewad
E.E.(S.O.)P&C