

Sub : Invitation of online quotations from TPQA (Third PartyQuality Assurance) registered & eligible NGOs / CBO / Specialized firm/ Company, proprietorship/ partnership firms, Companies registered under Companies Act, IT consultants/ IT Firms for Operation and Management of JSC Spread across Delhi (for two years further extendable upto two years).

1.BACKGROUND

Delhi Urban Shelter Improvement Board, GNCT of Delhi (here-in-after referred to as “DUSIB”) is presently providing Common Toilet Facilities popularly known as Jan Suvidha Complexes (here-in-after referred to as “JSCs”) in JJ Clusters/Slum Basties scattered all over Delhi. The DUSIB is the owner of these JSCs. There are approximately about **687 nos. JSCs** under the jurisdiction of DUSIB having about **22308 WCs**, which are presently operated, managed & maintained through Non-Government Agency (NGOs) /Firms/ Companies, meeting eligibility criteria.

Dusib invites online quotations from TPQA (Third PartyQuality Assurance) registered & eligible NGOs / CBO / Specialized firm/ Company, proprietorship/ partnership firms, Companies registered under Companies Act, IT consultants/ IT Firms for Operation and Management of JSC Spread across Delhi (for two years further extendable upto two years).

1. The 3rd party Quality Assurance for the O & M Agency shall inspect all the JSCs covered under scope of work and submit the report twice on monthly basis.
2. The JSCs under the scope of work can be combination of Pucca Structures/Semi-Pucca Structures/ Prefabricated Structures / Cubicles / Mobile Toilet Vans(MTVs).

2.SCOPE OF WORK

INTRODUCTION

A. ABOUT JAN SUVIDHA COMPLEXES MANAGED BY DUSIB

1. Delhi Urban Shelter Improvement Board, GNCT of Delhi (here-in-after referred to as “DUSIB”) is presently providing Common Toilet Facilities popularly known as Jan Suvidha Complexes (here-in-after referred to as “JSCs”) in JJ Clusters/Slum Basties scattered all over Delhi. The DUSIB is the owner of these JSCs. There are approximately 687 JSCs under the jurisdiction of DUSIB having about 22308 WCs, which are proposed to be operated, managed & maintained through Non-Government Organizations (NGOs) /Firms/ Companies, meeting eligibility criteria. The intending agencies need to be registered under respective act/ company act as well as Delhi Govt. e-procurement system.
2. The JSCs are proposed to be operated, managed & maintained by the successful bidder on “Free User Charge Basis” for specified period prescribed in the tender document/NIT. The O&M agency shall be paid by DUSIB for the work of operation, management & maintenance of JSCs as per the awarded rates & shall not be permitted to take user charges from the users under any circumstances.

3. The “Free User Charge” scheme has been implemented by the DUSIB in pursuance of the commitment of the GNCT of Delhi to make the city clean and to get rid of the menace of open defecation and as such the concerned O&M agency would be expected to work to that target.

The JSCs can be combination of Pucca Structures/Semi-Pucca Structures/ Prefabricated Structures / Cubicles / Mobile Toilet Vans(MTVs).

BROAD SCOPE OF THE PROJECT(Third party quality inspection/assurance agency)

A. OBJECTIVES :

The primary aim of the transformative initiative led by the Delhi Urban Shelter Improvement Board (DUSIB) is to elevate sanitation standards within the Jhuggie Basti areas of Delhi through rigorous 3rd- party quality assurance and auditing. The multifaceted project is meticulously designed to achieve the following objectives:

1. Precision in Pre-Operational Measures:

The project seeks to meticulously develop and implement a comprehensive questionnaire, approved by competent authority. This instrument will intricately assess the cleanliness, infrastructure, and sanitation equipment in the pre-operational phase. The aim is to establish a solid foundation for operational activities with a keen focus on ensuring optimal conditions for user facilities.

2. Continuous Monitoring through Monthly Operational Audits:

Implementation of monthly operational audits serves as one of the critical component of the initiative. These audits are designed to be a continuous monitoring mechanism, scrutinizing ongoing maintenance and management activities. The primary aim is to ensure strict adherence to agreed-upon standards, with a particular emphasis on assessing the usability and effectiveness of user facilities. Key measures evaluated include the cleanliness and usability of toilet seats, consistent water availability, proper waste disposal mechanisms, adequate ventilation, and the efficacy of maintenance practices.

3. Hygiene and Sanitation Excellence:

The project places specific attention on hygiene and sanitation assessments. This involves a comprehensive examination of cleanliness levels, waste disposal protocols, and adherence to stringent health and safety standards. By doing so, the project aims to set elevated benchmarks in maintaining a healthy and sanitary environment within the Jhuggie Basti areas.

4. Compliance with Regulations and Guidelines:

Integral to the project is a commitment to conducting compliance audits. These audits verify the meticulous adherence to relevant laws, regulations, and guidelines governing sanitation facilities. The aim is to ensure that all practices align with legal and regulatory frameworks, fostering a transparent and accountable operation.

5. Continuous Performance Enhancement:

The establishment of a continuous performance monitoring framework underscores the

commitment to assessing and enhancing the efficiency and effectiveness of the operation, management, and maintenance practices. The goal is to adapt and improve continually, ensuring sustained and impactful results.

6. Contributing to Open Defecation Prevention:

The overarching goal of the project is to provide comprehensive insights and actionable recommendations. By doing so, the initiative aims to contribute significantly to the sustained prevention of open defecation in the Jhuggie Basti areas, fostering a healthier and more dignified living environment for the residents.

7. In particular, DUSIB wishes to achieve the following performance:

- a) All toilet seats, urinals and bathrooms should be clean and usable at all times during opening hours
- b) Availability of water in all JSC's.
- c) Usable taps and fittings, with no leakage OR water tank in or outside the structure with water available in it at all times during opening hours
- d) Adequate ventilation facility (vents, slanted glass slats and/or exhaust fan)
- e) Available and regularly cleaned (covered) litter bins, with bins available with each toilet seat / outside (only in female seats)
- f) Wash basin(s) / hand wash facility clean and usable at all times
- g) Available soap/ operational soap dispenser
- h) Functional bolting arrangements on all doors of all toilet seats
- i) Staff is provided with necessary supplies of consumables, cleaning equipment, protective gear and inventory, and there is no stock out for longer than 24 hours
- j) Roster being maintained for regular cleaning and maintenance and a caretaker is on duty at all times during open hours
- k) Premises are well lit at all times, both within and outside, with each seat having its own light point, and all light points functional
- l) Public/ Community Toilet is visible on Google Maps toilet locator as 'DUSIB Toilet'
- m) Premises are visible to passers by, with clear signage, and the area within 3m from each direction of the structure is not encroached by unauthorized construction and vendors
- n) Gender- segregated, separate entrances for males and females, if both facilities available
- o) Name and contact details of the following are displayed prominently - Toilet identification number, name of EE under whose jurisdiction toilet is covered, ward number and maintenance authority prominently displayed for each JSC. Details of O M agency, details of care taker and safai karamchari.
- p) Complaint registration and incidents resolved within 24 hours of registration of complaint.
- q) O&M model present for upkeep of standalone urinal/ bathing area
- r) Untreated sewage/ fecal sludge from the toilet is not discharged and/or dumped into drains, open areas or water bodies.

B. METHODOLOGY

DUSIB proposes to engage a third party Quality Inspection/Assurance Agency to assist / Support DUSIB for supervising and administering the said JSC managing agencies so that these agencies provide the quality and level of services as envisaged in the contract with them. The TPQI agency would be expected to perform following –

Responsibilities of Quality Assurance Agency:

The work of third party Quality Inspection/Assurance agency and auditing for the operation, management, and maintenance of toilet complexes under the jurisdiction of DUSIB will involve timely inspections conducted across Delhi. These inspections are crucial in ensuring the well-being of the Jhuggie Basti dwellers and preventing open defecation in and around the JJ Basti areas. The inspections will be carried out at various stages of different types of work, as outlined below:

1. Pre-Operational Phase

a. Questionnaire Development

- i. Agency will review the roles and responsibilities of JSC management agencies and a descriptive and in-depth questionnaire will be developed in consultation with DUSIB to carry out assessment on the given parameters prescribed by DUSIB itself.
- ii. The agency will outline and draft Service Level Agreements (SLAs) in collaboration with DUSIB for JSC management agencies, covering all contractual aspects.
- iii. The agency will establish quality criteria for evaluating JSC performance against SLAs.
- iv. The agency will develop a methodology, in consultation with DUSIB, for assessing these quality parameters.
- v. The agency will create formats and protocols for JSCs to submit Returns and self-assessments of their operations and SLA achievements, including timely submissions with GPS, photos, and timestamps.
- vi. Design a user feedback forms and community assessment forms for conducting assessments of customer feedback through surveys and complaint monitoring system.

b. Audit Design

- i. The Agency shall Design (in consultation with DUSIB) a system of Auditing of Returns filed, Inspection Report, Survey data, and Social media feedback by independent Auditors
- ii. The Audit design should be such that it meets the objectives of DUSIB and the objectives outlines in para 'a' above.
- iii. The Agency will Develop (in consultation with DUSIB) a system and

protocol for Quality Check of Inspection data and Audit Reports through Shadow assessments by high quality auditors. It is expected that at least 5% of inspections and Audits should be subject to Quality Check Protocol.

c. Pilot Testing

- i. In this phase, a minor chunk of the Jan Suvidha Complexes will be assessed to report the effectiveness and make the questionnaire and assessment more align with the goal.
- ii. Similarly, the audit system so designed will be subject to pilot testing so as to get feedback on improvement in forms / questionnaire, inspection and audit protocols and such improvements shall be implemented.

2. Operational Phase

a. Inspection Protocol

- i. This phase stresses on development of a standardized inspection protocol outlining key criteria for evaluating operational aspects. Furthermore, it includes criteria such as cleanliness of toiletseats, water availability, waste disposal mechanisms, ventilation, and maintenance practices.
- ii. The Third party quality assurance Agency will design an inspection protocol for independent assessors to evaluate each JSC performance at least two times monthly.
- iii. The Agency will develop a protocol for user feed-back / User Survey with protocols for sampling and conducting annual surveys. It is expected that all the communities using the JSCs are surveyed at least once a year.

b. Development of Training Modules

- i. To ensure the consistency of the survey the assessors will be required to be trained in detail on the concepts and on the practical details of the project. The assessors will also be required to be trained on the usability of the technical know-how of the data collection mobile/web application. Agency will develop training module and documentation for training of assessors, inspectors, surveyors, auditors and other personnel deployed for the project.
- ii. Agency will Design and develop Training module for JSC management Agency functionaries and DUSIB Engineers to support/ assist them in submitting their returns, ATRs, Responses and using of IT system so developed specially for the project.
- iii. Agency will Provide a helpdesk to DUSIB/ JSC agency functionaries to assist them in meeting their obligations. Develop Support/ Training videos for support of new entrants so that they can understand and work on the IT system quickly.

c. IT Application Development

- i. Agency will develop a secure IT application system and accessible through web mobile applications for managing, Returns / self assessments, inspections, surveys, and user feedback, integrating social media platforms in consultation with DUSIB IT Team.

- ii. The IT system should enable Agencies, Surveyors as well as the Inspectors to file their data/ reports online on real time basis. It should be integrated with the social media platform developed under this project.
- iii. Agency shall design and provide software and hardware architecture in the form of system design by using latest tools and technology. The System Design Document, Table Architecture, and other documentation to enable DUSIB to manage the IT system independently (if need be) shall be provided by the Agency to DUSIB.
- iv. Advise DUSIB in procurement of Servers, Drives, disc-space, softwares, services, security protocols and firewalls for deployment of such IT system.
- v. The software shall be the property of DUSIB and Agency will provide complete source code of the software/app developed. In addition to Software all IPR rights shall vests with DUSIB.
- vi. The software so developed will provide inspection report on real time basis through internet. The scope of work also includes making prototype, documentation, Testing and glitch free running of applications.
- vii. All the storage and server shall be kept at a place designated in DUSIB HQ/Vikas Kuteer/Disaster recovery site or any other space (or remote location) finalized by DUSIB.
- viii. Agency will Develop a Whatsapp system / Facebook Page (or any other suitable social media platform) for DUSIB JSC Management wherein the users can give their feedbacks and complaints online.
- ix. The social media platform should be integrated with the IT system for JSC management so that the said feedbacks are made available to the JSC Agency / DUSIB users on the dashboard itself. Similarly ATR / Response entered in the IT system should be integrated on the social media platform so that the complainant gets the response directly on the platform.
- x. Agency will Assist DUSIB in popularizing the said Social media platform.
- xi. The IT system should have an on-line system for submission of ATR on Audit reports by JSC Agencies & DUSIB Engineers
- xii. Broad scope of IT development:-

Salient features which will explicitly include development of secure IT application which can be run on Desktop/web/mobile device (smartphones and tablets) and should have features to be integrated with various social media platforms and data visibility on real time basis.

The system design and architecture should be scalable for future anticipated extension with respect to JSC's having various elements, the IT application should have inspection forms, managing return forms, self-assessment forms, survey forms and user feedback forms etc, IT application capabilities to show real time photographs and videos.

- software design as well as hardware design with complete system architecture

- Testing of software
- removal of bugs
- upgradation as per feedbacks
- documentation
- Running and maintenance of IT application on cloud server with backup at control room
- disaster recovery of IT application and system in case of exigencies
- Design and development of IT dashboard and integrating with overall reporting system
- Database Design
- Smooth handover at the expiry of contract to DUSIB IT team with complete documentation and source code
- All IPR must vest with DUSIB deptt.
- Development of operational manual for management of IT system
- Marking of JSC(DUSIB toilets) on google maps.
- The third party quality assurance agency shall transfer the source code at the time of deployment to DUSIB IT team.
- Security Audit of software to be done by cert-in/ delhi govt. empaneled agency.

3. Conduct of Training

- a. The Agency shall conduct training of its personnel, JSC Agency personnel as well as DUSIB personnel as and when required (in batches of 20 to optimize resources) on the SLA system, IT system, and Functions, Role and responsibilities of the concerned user for effective implementation.
- b. Space and infrastructure required (Training hall, Projection system, computer and internet) for training will be provided by DUSIB. Agency shall provide the trainers.

4. Assessments / Inspections of JSC functioning & data collection

- a. Field Assessment
 - i. The Agency shall deploy inspectors/ assessors, with appropriate vehicle (motor-cycle) and equipment (smart phones with data connectivity) to conduct inspection as per the protocol. Proper record of movement of such assessors shall be maintained on the IT system, preferably through GPS tracking.
 - ii. The agency shall deploy only trained personnel on the duties under this project.
 - iii. In this phase, assessment/ inspection as per protocol will be carried out through an IT portal system /app deployed by the agency. Team of assessors deployed to carry in each Jan Suvidha Complexes available in the National Capital.
 - iv. The focus of the assessment will be towards maintenance, availability of services, cleanliness, sanitation, and hygiene.

- b. Consumer /User Feedback and Surveys
 - i. A stipulated personal interview form will be introduced in the same to conduct citizen validation and confirm the consistency of the services being provided the O&M agency. The citizen validation element will also make the competent authority aware about the type of service and efficiency of the O&M agency.
 - ii. **User Satisfaction Surveys:** Feedback from the Jhuggie Basti dwellers will be collected to gauge their satisfaction with the facilities and services provided. This feedback will be essential for making improvements based on user preferences and needs.
 - iii. Agency will deploy survey team for conducting user feedback with suitable equipment (TABs preferably) as per the survey protocol.
- c. Control room
 - i. A control room will be set up at DUSIB HQ/Vikas Kuteer. The team at control room will regularly conduct the realtime quality check of the collected data.
 - ii. While Space for control Room will be provided by DUSIB, the Agency will provide necessary equipments (such as computers, networking, internet) for operationalizing the control room.
- d. Data Collection and cleaning
 - i. The data collected by the field assessors will be sent to the Control Room. Due to the subjective nature of the data, a team of professionals in the Control Room will analyse, clean, and make data understandable to the competent authority. The Control room will ensure correctness and completeness of data for further audits.
- e. Sampling and Mapping of Data
 - i. There are about 687 Public Toilet (Jan Suvidha Centre) and data will be collected in each toilet on components related to all parameters especially wrt cleanliness and maintenance twice a month.
 - ii. Agency shall Develop database of the Toilet Seat and Surroundings Photographs with GPS stamps along with their status in order to develop an AI model for automatic assessment in future.

5. Auditing and performance Enhancement

- a. Data Monitoring and Control
 - i. At the control room, there shall be setup by the Agency to monitor the daily progress, consistency and quality of the survey. The inspection report shall be monitored on a real time basis and the queries of the field assessors will be resolved promptly by the team.
 - ii. The Control room will do a real time quality check of the data, analyse, clean, tag, and make the data (being received from various sources) usable for subsequent audits. The Control room shall monitor timely receipts of data / reports as per the protocol, identify defaulters, generate exception reports, and pursue with the concerned defaulting personnel to get the report in time.
 - iii. The data collected by on field assessors undergoes a thorough and rigorous three-layer quality checks:

Level 1: Trained field assessor collects the data on-ground and uploads it on a real time basis through mobile application (Smart Phone/Tablet)

Level 2: Quality check coordinator (Stationed at Control Room) who is mapped to a field assessor shall monitor the survey and validate the information received at the back end

Level 3: A team of senior 3rd- party team members (Auditors) re-evaluates the field data collect

- b. Audit of Jan Suvidha Complexes
 - i. The Agency will conduct twice a month audit of each JSC, through team of auditors, to review, inspection reports, survey data, and social media feedback if any.
 - ii. **Regular Operational Audits:** Routine audits will be carried out during the operational phase to monitor ongoing maintenance and management activities. These audits will verify that the services are being provided as per the agreed-upon standards and that user facilities are in good condition.
 - iii. **Hygiene and Sanitation Audits:** Emphasis will be placed on maintaining high standards of hygiene and sanitation. Inspections will focus on cleanliness, waste disposal, and adherence to health and safety protocols.

- iv. **Compliance Audits:** Ensuring compliance with all relevant laws, regulations, and contractual agreements is of paramount importance. Audits will verify that the operation, management, and maintenance practices adhere to legal and contractual obligations.
- v. The Audit team will examine the Returns / Reports / Survey Feedbacks / Complaints/ Social media feedback, (and the responses of the JSC management agencies on such complaints / feedback) in conducting the audits.
- vi. The audit will be conducted on qualitative as well as quantitative terms and use statistical tools to Generate Audit Reports on weekly basis, draw inferences and communicate to JSC Agencies and concerned Executive engineers, with recommendations to rectify deficiencies, if any along with timelines.
- vii. Space for seating the Audit team would be provided by DUSIB. Equipments such as computers, internet, data network will be the responsibility of the agency.
- viii. The Agency will establish a protocol for shadow assessments by high-quality auditors to ensure the quality of inspection data and audit reports.

c. Conducting Monthly reviews

- i. **Performance Monitoring:** Continuous monitoring of performance metrics will be conducted to evaluate the efficiency and effectiveness of the operation and maintenance work, ensuring that the intended goals are met.
- ii. Agency shall Review the ATRs on Audit Reports on monthly basis, do field verification of ATRs to check their authenticity and generate Exception Reports.
- iii. Agency shall Recommend, on monthly basis Penalties to be imposed on the JSC agencies for persistent violation of SLAs along with proofs.
- iv. Agency shall Assist DUSIB engineers to conduct monthly review meeting with JSC management agencies on the performance.
- v. agency shall from time to time review the system & procedure for continuous improvements and to review errors, if any. The 3rd party agency shall also from time to time ascertain complete transparency to maintain accuracy / credibility and reliability.

6. Operations and maintenance of IT system

- 1. Agency Manage and operate the IT System for a period of 5 years (from the date of deployment of IT system) on behalf of DUSIB by deploying suitable trained personnel.

Explanation – Date of deployment for the purpose para would be the date from which the JSC Agencies and Field inspectors start filing on-line returns / reports (in respect of all JSC) and the integrated social media platform is made operational.

- 2. Agency shall Develop Operation Manuals for management of IT system.
- 3. The operation manual should have details of table structures and system designs etc. Train DUSIB personnel in management, operations and bugs removal of the said IT systems so that DUSIB would be in a position to takeover the system from the TPQI agency after expiry of the contract.

7. Design of AI based Audit system

In phase II of this project, Agency would Develop, train and run an AI model using the database above so that a system of automatic AI based audit can be developed in future.

8. Additional Quality Checks

- a) DUSIB at any point of time may conduct random checking regarding authenticity of reports submitted.
- b) The third party agency shall abide to all the directions/instruction given by DUSIB Department in letter and inspirit.

C. FINANCIAL BID

Name of work: Pay & Use JSC (Revenue)

Sub Head: 3rd party Quality Inspection/Assurance for Operation, Management and Maintenance of Jan Suvridha Complexes at various location spread across Delhi (for two years further extendable up to two years).

S. No	Description of Item	Unit	Qty.	Quoted Rate per Unit (in Rs)	Total Amount (in Rs.)
1	Design of Performa and Protocol for JSC inspection	Lump Sum	1		
2	Design of Performa for self-assessment return	Lump Sum	1		
3	Design of Performa and protocol for user survey	Lump Sum	1		
4	Design of audit methodology & protocol	Lump Sum	1		
5	Pilot testing of (1) to (4) (Included in (1) to (4) no separate rate shall be payable.	-	-	N.A.	N.A.
Amount A					
6	Conduct of survey (25 user to be surveyed in each survey)	per Survey	1374		
Amount B					
7	Training Module	-	-	N.A.	N.A.
a)	Development of training module for JSC O&M agency/Engineers	Lump sum	1		
b)	Conducting training of O&M agency/Engineers	Per training(1/2 day -4 hrs)	10		
c)	Development of training module video	Lump Sum	2		
Amount C					
8	Help desk:- Setting up of help desk at DUSIB control room at Punarwas Bhawan or Vikas Kutir	Per month	24		
Amount D					
9	IT Application development (IT Portal): The scope of work includes complete system design architecture, management & operation with reference to latest technology prevalent (700 DUSIB JSC approx.) (Kindly see Foot Note (X1) for scope of work item)	Lump Sum	1		

	(Kindly see Foot Note (X2) for Payment schedule)				
	Amount E				
10	Data collection, Field assessment -: Inspection of JSC with smartphones with data connectivity and GPS tracking (as per terms and condition of contract)		N.A.	N.A.	N.A.
	Conduct of JSC inspection by assessor 02 (two) inspection per month for each JSC		N.A.	N.A.	N.A.
	JSC having up to 20 seats CAT A(<20)	Per JSC per month	236*24		
	JSC having 21 to 50 seats CAT B(21-50)	Per JSC per month	361*24		
	JSC having more than 50 seats CAT C(>50)	Per JSC per month	90*24		
				Amount G	
11	Audit of JSC Complexes Monthly audit of each JSC with respect to various parameters including 1) Regular operational Audit 2) Hygiene and sanitation Audit 3) Compliance Audit One audit of each JSC every month		N.A.	N.A.	N.A.
	JSC upto 20 seats	Per JSC Per Month	236*24		
	JSC upto 21-50 seats	Per JSC Per Month	361*24		
	JSC greater than 50 seats	Per JSC Per Month	90*24		
				Amount F	
12	Setting up of IT control room at DUSIB headquarter <ul style="list-style-type: none"> • Data monitoring and control on real time basis • Real time quality check of data and generation of reports • Quality check of data collected by field assessors • Validation of data received 	Per month	24		
	Amount H				

13	Monthly review with respect to various parameters including 1) Performance monitoring 2) Action taken report on inspections	Per month	24		
				Amount I	
14	Design of AI based audit system In phase II of this project, Agency would develop, train and run an AI model using the database above so that a system of automatic AI based audit can be developed in future.	Lump Sum	1		
				Amount J	
15	Operation and maintenance of IT system	Per year	5		
				Amount K	
				Gross Total	

Note : The rate must include basic rate , Contractor Profit @15 % , 1 % Water Charges and 1 % labour Cess. The Rate shall be quoted with proper justification , how the rate is calculated (i.e all components of item must be clearly specified.

