# Terms of Reference (ToR) <u>for</u> Research Project

Title	Study of requirements for street and public facility cleaning services.
<b>Sectional Committee</b>	Environmental Services Sectional Committee, SSD 07
Duration	04 months

#### 1. BACKGROUND

With the introduction of Swachh Bharat Abhiyan, Government of India has increased efforts to enhance sanitation and cleanliness practices in India. This has opened avenues and increased opportunities for private bodies to engage into contracts for cleanliness project throughout the country. Even the Urban Local Bodies, involved in the sanitation activities across the various topographical regions of India have to be equipped with relevant resources to carry out various schemes of government emerging from Swachh Bharat Abhiyan.

There are several Indian Standards addressing solid waste management, however, no Indian Standard indicating the requirements of street and public facility cleaning service providers is available. Therefore, Environmental Services Sectional Committee, SSD 07 decided to formulate an Indian standard on this subject. It is further decided to conduct a through study and collection of data on operations, procedures, best practices and key parameter relevant to the subject to make an evidence-based standard. This approach will ensure that the formulated Indian Standard is practical, adaptable, environmentally acceptable, cost effective and implementable, and address the specific needs of Indian cities.

#### 2. OBJECTIVE

To collect and analyse the information and data from primary and secondary sources relevant to service provider including classification of streets and waste, planning, resources, operational requirements and key parameters for evaluation of quality of services and monitoring mechanism.

#### 3. SCOPE

- **3.1** Undertake thorough study of existing literature which includes guidelines, published research papers, established documents, study conducted by any other organization, Standard Operating Procedures (SoPs), best practices, international standards/standards of NSBs of foreign country, if any.
- **3.2** Comparative analysis of data collected on parameters given in para **3.1**.
- **3.3** Identification of cities with varying Swachh Survekshan Ranking, under different population category, existing in different topographical zones as per the sampling plan given in **3.4** to study

the following during visits:

- a) Standard Terminology used in street and public facility cleaning services;
- b) Classification of street waste;
- c) Classification of streets;
- d) Infrastructure required;
- e) Types of services involved during the process;
- f) Roles and responsibilities of employees;
- g) Strategies for deployment of human resources;
- h) Training and competence of personnel;
- i) Quality assurance and operational requirements;
- j) Requirements for planning;
- k) Frequency/periodicity of cleaning street and public facility;
- l) Processes of transfer, processing, and disposal of street sweepings;
- m) Requirements for Public structure washing;
- n) Requirements for waste management including segregation practices and its collection;
- o) Requirements for health and safety of personnel;
- p) Documentation and record keeping;
- q) KPIs for ranking of service provider.
- r) Specific service requirements for different Geographical regions;
- s) Monitoring and Compliance requirements.
- t) Sustainable practices adopted by the service provider.

Note: The sub-clauses under 3.1 and 3.3 are not exhaustive. Any other relevant information/data may be included in the study and outcome to be incorporated in the analytical report.

**3.4** Conduct visits to the service providers situated in different geographical regions (preferably covering at least one city each from the regions under the category of plain, hill, desert and costal) as per the Sampling Plan given below:

Type Population category	Swachh Survekshan Ranking 2022	Number of Cities to be visited	Data to be Collected
Million Plus population	Rank 1	4	As per para 3.3
	One from Rank 2		
	to 5.		
	One Middle		
	ranking		

	One Low		
	Ranking		
Above 3 lakhs to 10 lakh	Rank 1	2	As per para 3.3
population	One Low		
	Ranking		
Above 1 lakh to 3 lakh	Between Rank 1	2	As per para 3.3
population	to 5		
	One Low		
	Ranking		
less than 1 lakh population	Between Rank 1	2	As per para 3.3
	to 3		
	1 Middle Ranking		

**3.5** Prepare an analytical report covering the details mentioned in para from **3.1** to **3.4**.

### 4. RESEARCH METHODOLOGY

The study should follow a structured methodology that includes, but not limited to the followings:

- a. A thorough literature review should be done as per para **3.1**.
- b. Identification of cities complying to para **3.4**. Before conducting on-site visits for the study of service requirements, take consent of BIS on sampling plan.
- c. Witness and observe the requirements given in para **3.3** during the visits. Take interviews of experts through structured questionnaire, where required.
- d. Focused group discussions after the visits to analyze and comparative analysis of the collected data.
- e. Prepare a report based on the findings and data collected as per para 3.

#### 5. DELIVERABLES

Preparation of a report containing information and data in context with para 3 along with the evidence containing statements, questionnaire, details of interviews, outcome of consultation with experts and data collected during literature review and visits. Hard as well as soft copy of the report shall be submitted within the timeframe.

## 6. TIMELINE AND METHOD OF PROGRESS REVIEW

The time frame of completing the study and submitting the report is 4 months from the date of the award of the project.

# **Stagewise timelines:**

- 1. Interim Report covering the review of the literatures, existing stipulations and visits plan for approval of BIS within **1 months** from the date of award of project from BIS.
- 2. Report of site visits by end of **3 months** from the date of award of project from BIS.
- 3. Draft project report covering all the aspects of the ToR By end of **4 months** from the date of assignment received from BIS.
- 4. The researcher taking up the project shall clear all doubts on provisions of research including ToR and BIS guidelines before acceptance.

# **7** BIS Support

- **7.1** BIS will provide access to latest editions of supporting Indian and International Standards as identified by the researcher.
- **7.2** BIS will facilitate assistance to introduce the research project to research organizations, government departments, and Industries/Service Providers.

#### 8. NODAL PERSON

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