

Terms of Reference/Request for Proposal

Date: 31.07.2025

Proposals are invited by Technology Informatics Design Endeavour (TIDE) for "Selection of Vendor for developing route optimization of the solid waste collection vehicles in Chintamani, Karnataka

Introduction

Technology Informatics Design Endeavour (TIDE) is a development organization based in Bengaluru that leverages technology for conserving the environment, creating livelihoods, and addressing societal issues. TIDE's work encompasses energy access and biomass-based cooking solutions, environment conservation through energy waste and water interventions, and Technology based innovative livelihoods, particularly with a focus on rural women. TIDE is currently implementing a project titled Integrated Water Management in partnership with BORDA, in different towns of Karnataka. For more information about TIDE, please visit www.tide-india.org

Title	"Selection of Vendor for Route Optimization of the Solid Waste Collection Vehicles in Chintamani, Karnataka.
Location	Chintamani, Karnataka
Nature of Assignment	The project aims to improve the efficiency of solid waste collection in Chintamani Town by developing optimized collection routes. The selected vendor will begin with a baseline assessment of current collection routes, identifying inefficiencies and service gaps. Based on this analysis, the vendor will design optimized routes to ensure better coverage As part of the project, the vendor will recommend simple, user-interactive tools to help CMC easily track and manage collection routes. These tools should be designed for non-technical users and support real-time or daily operational monitoring. The vendor will also conduct an endline assessment to evaluate the impact of the optimized routes and tools on collection efficiency
Contract period	The contract period will be for the duration of 45 days

Background of Project

Chintamani, located in Chintamani Taluk of Chikkaballapura district, covers an area of 15.01 square kilometers and has an estimated population of around 88,000 (as of 2021). The city generates approximately 30 tonnes of municipal solid waste (MSW) per day. Of this, the City Municipal Council



(CMC) currently collects around 16 tonnes daily, primarily from residential areas, commercial establishments, and blackspots.

Waste collection in Chintamani is undertaken through two parallel systems. The CMC employs sanitation drivers and helpers to collect waste from residential areas, commercial establishments blackspots. Parallelly , Self-Help Groups (SHGs) are involved in door-to-door collection from high-income households, contributing about 15% of the total waste collection. Services. SHG operations are primarily in Wards 6, 9, 10, and partially in Wards 4, 7, 11, 12, 13, 14, and 23.

Despite the dual system, waste collection remains irregular across the town, especially in certain wards and in slum and low-income areas. These service gaps contribute to the accumulation of uncollected waste in the town.

The city currently uses a combination of pushcarts, auto-tippers, tractor trailers, and compactors for waste collection. For secondary transportation, two compactors (each transferring 6–7 tonnes per trip) and three tractor trailers.

Improving the overall waste management system will require optimization of collection routes, and enhanced vehicle utilization. In addition to that, monitoring ward-wise collection performance can support more equitable and efficient service delivery across the town

Terms of Reference:

The bidder shall be responsible for the activities and roles mentioned herein, and shall also support TIDE wherever reasonable and possible, to ensure that the objectives of the assignment are met. The details of the assignment are given below:

Scope of assignment:

The overall objective of this assignment is to improve the waste collection of Chintamani through route optimization The selected agency will be responsible for leading the project with the following scope:



- Conduct a comprehensive baseline assessment of Chintamani's current waste collection system, covering all 31 wards.
- Identify gaps in primary and secondary waste collection, particularly in slums and low-income areas.
- Analyse the efficiency of current vehicle usage, number of trips per day, and load capacities.
- Recommend optimized routing and trip scheduling to improve overall waste transfer from primary to secondary collection points.
- Suggest rational deployment of vehicles based on area demand and generation to minimize fuel use and increase coverage.
- Recommend technological interventions, if needed, such as GPS tracking, or route management apps
- Develop simple, practical monitoring tools for daily tracking of waste collection and transportation performance.
- Establish ward-wise performance indicators to measure improvements in collection efficiency and coverage.
- Conduct an end-line assessment to compare with baseline data and evaluate the impact of route optimization

Deliverables:

- PA comprehensive baseline assessment report mapping
- An optimized waste collection and transportation route plan, including detailed schedules and a vehicle deployment strategy including monitoring tools
- Endline assessment report after route planning

Eligibility criteria:

The firm should meet the following minimum eligibility criteria:

- The company/firm/contractor should be registered with a legally binding registration document.
- Maintenance of comprehensive documentation related to statutory compliance, including permits, approvals, monitoring records, and compliance reports.
- The company/firm/contractor shouldn't have been blacklisted by central/state government agencies and have no legal liability towards any governmental or non-governmental agency

Note: The Consultants need to submit supporting documentary evidence for the criteria.

Evaluation Criteria:

S.	Indicator	Description	Document Evidence	Weightage
No				



Agency/consultant should have a minimum of 5 years' experience in the field of waste management including preparation of DPRs and support in implementation of solid waste management plants. Work order/Work completion certificate/ proof of work/reports Self-certification providing details of the similar project (Details of the project should include Name of project and description, start and completion date of the project, Location, and total project cost)	1	Bid Price	Price quoted by the agency for completion of the assignment	Provide a lump sum cost in Annexure IV along with supporting documentation that details the breakdown of components.	50%
All the eligible firms will be graded on the above criteria. The one with the highest grade		Experience	have a minimum of 5 years' experience in the field of waste management including preparation of DPRs and support in implementation of solid waste management plants.	certificate/ proof of work/reports Self-certification providing details of the similar project (Details of the project should include Name of project and description, start and completion date of the project, Location, and total project cost)	

All the eligible firms will be graded on the above criteria. The one with the highest grade will be awarded the contract.

Duration of the assignment:

The project shall be executed within 45 days of the contract's award, shall be delivered by the **2**nd **week of September 2025.** The agency should adhere to the work plan as shown below. **(Subject to revision based on mutual consent or as per ground condition)**

Work Plan:

The project duration is from the 2^{nd} week of August 2025 to 4^{th} week of September 2025.

Activity	2 nd Week August-3 rd Week of August	4 th Week of August- 5 th Week August	1st Week of September-2nd Week of September	3 rd September Week- September 4 th Week
Award of contract				
Baseline assessment and gap analysis study				
Submission of route optimization plan				
Submission of the endline assessment report.				

Schedule of Payment:

No. Percentage of Payment	Sl.	Deliverable	Stage of payment	Percentage of Payment
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1	Baseline assessment	1 st	30%
2	Route optimization plan	2 nd	50%
3	End line assessment	3 rd	20%

Note: The payment schedule will be finalized in consultation with the Consultant at the contract award stage. All the payments will be done only after we receive the original invoice to the office address.

Submission of Proposal and deliverables:

The proposal must be submitted over email to the email id: priyanka.r@tide-india.org & iwm.accountant@tide-india.org with the following documents attached,

- Supporting documents for eligibility and evaluation criteria
- Self-certification of not being blacklisted by central/state government agencies.
- Properly filled Annexure I to VI

Confidentiality and Intellectual and Other Property Rights

All reports, notes, statistics and other documents and data compiled and collected, or software developed by the Contractor under this Agreement shall be confidential and the property of TIDE. The Parties herein agree to keep the terms of this TOR all or any information which any or all of the parties herein shall become acquainted with shall not be disclosed, either directly or indirectly to third parties or be used in any way, or in any manner that would be detrimental to the business of the partners.

Sd/-Director-TIDE



ANNEXURES

Annexure I: Letter for EOI Submission to Be Submitted on the Letter Head of the Institution

Annexure II: Information regarding any Conflicting activities and declaration

Annexure III: Details of a minimum of 3 similar works executed by the bidder.

Annexure IV: Quote/Bid FORM

Annexure V: Methodology

Annexure VI: CVs of the team members who are likely to work on the project.



ANNEXURE I

LETTER FOR EOI SUBMISSION TO BE SUBMITTED ON THE LETTERHEAD OF THE ORGANISATION

Ref: No:	Date:
Executive Director, TIDE, FF-1, Sapthagiri Apartments, No.30, 10th Cross, 15th Main Road, RMV Extension, Sadashiv Nagar, Bengaluru – 560080	
Dear Sir/Madam	
We, the undersigned, offer to provide the services as required in your invitation	
We hereby certify that all the information and statements made in this propaction accept that any misstatement or misrepresentation in the enclosed document disqualification.	
We understand that you are not bound to accept/reject any proposal with reason.	out assigning any
Yours faithfully	
Authorized Signatory	



NAME & DESIGNATION

ANNEXURE II

INFORMATION REGARDING ANY CONFLICTING ACTIVITIES AND DECLARATION THEREOF

Is the party engaged in any activities which conflict with the proposed activities of TIDE as mentioned in this document?

If yes:

Please provide information on activities the institution is engaged in, which in your opinion, is of a nature that conflicts with the assignment desired to be awarded by CoE.

If no:

We hereby declare that our organization is not either directly or indirectly engaged in any activities which can be termed conflicting activities as mentioned in the EOI document. It is understood that any misrepresentation or misstatement in this regard shall lead to our organization to be disqualified from the entire process.

Signature of the authorized signatory

Name

Designation





Technology Informatics Design Endeavour FF1, Sapthagiri apartments, No. 30, 10th cross, 15th main road, RMV extension, Sadashiv Nagar, Bengaluru – 560080



TO BE SUBMITTED ON THE LETTERHEAD ANNEXURE III

Details of a minimum of 5 similar works executed.

(Amount Rs. in Lakh)

Sl.No.	Nature of similar work carried out	Name of the party for whom such work was carried out	The total value of the work	Period of the assignment	Contact person name and mobile no.

AUTHORISED SIGNATORY



TO BE SUBMITTED ON THE LETTERHEAD

ANNEXURE IV

Quote/Bid FORM

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The Executive Director

TIDE

FF-1, Sapthagiri Apartments, No. 30, 10th Cross, 15th Main Rd,

Raj Mahal Vilas Extension, Sadashivanagar,

Bengaluru, 560080

I hereby offer to submit our EOI for the "Selection of Vendor for developing route optimization of the solid waste collection vehicles in Chintamani, Karnataka" assignment as a Service Provider/Expert/supplier of material/services etc.

Sl No.	Parameters	Particulars/Description
1.	Name	
2.	Address	
3.	Contact Details	Email:
	Contact Details	Mobile:
4.	Total Lumpsum Cost/Fee (in Rupees) Inclusive of GST for work completed as per ToR	
	Provide Breakup as sun annexure	
5.	GST Number (If no GST please submit a declaration)	

Note: Site Visits charges will not be reimbursed

Declaration:

I certify that the above particulars are correct. I understand and agree that if any statement is found to be false or incorrect, TIDE reserves the right to reject my application.

I certify that if awarded the assignment, I shall maintain confidentiality and shall avoid. conflict of interests.

Signature:	Place:
Full name:	Date:



TO BE SUBMITTED ON THE LETTERHEAD

Annexure V

Methodology

CVs of the team members who are likely to work on the project.



TO BE SUBMITTED ON THE LETTERHEAD

Annexure VI

CVs of the team members who are likely to work on the project.