

# Terms of reference (ToRs) for the procurement of services below the EU threshold

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<b>Route Rationalization and City Bus Service Improvement Study for Coimbatore</b>	<b>Project number/ cost centre: 15.2197.0-001.00</b>
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## **0. List of abbreviations**

AVB	General Terms and Conditions of Contract (AVB) for supplying services and work
ToR	Terms of reference
PT	Public Transport
IPT	Intermediate Public Transport
O&D	Origin and Destination
TNSTC	Tamil Nadu State Transport Corporation

## 1. Context

### **Brief description of the Project**

Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ) GmbH and Ministry of Housing and Urban Affairs (MoHUA) are jointly implementing the “Integrated Sustainable Urban Transport Systems for Smart Cities (SMART-SUT)” project to improve the planning and implementation of sustainable urban transport in selected Indian cities. The implementation focuses on the pilot cities of Bhubaneswar, Coimbatore, and Kochi, which were selected by the German Government for special support on their way to becoming a Smart City.

The Project combines transport-oriented and methodological advisory services and training of the political partner and the implementing organisations (meso-level) with selected demonstration measures for sustainable urban transport at the micro level (multi-level and multi-actor approach). The project has four components namely: (i) planning and implementing sustainable urban transport projects; (ii) institutional performance and coordination; (iii) learning and exchange formats, (iv) state-level capacity building

### **Background**

The Coimbatore, is vibrant industrial city which is located in the western part of Tamil Nadu and total of 2.3 million inhabitants reside here, making it the second largest city in the state. While the population of city is growing quickly, but its personal motor vehicle population is growing four times. Formal public transport accounts for around one third of all the trips in the city.

The last two decades Coimbatore has witnessed economic growth, growth in population, increased urban sprawl, increased vehicle ownership and consequent traffic volumes far higher than what was expected. It is therefore reasonable to expect a more than proportionate increase in associated transport problems such as congestion, pollution and environmental hazards. Currently, city public transport is being managed by Tamil Nadu State Transport Corporation (TNSTC) and private bus operators which operate town bus services in most parts of the city and villages in the district. Number of mofussil routes operated by the TNSTC Coimbatore division is 119 with 446 number of buses. Number of town buses held in the Coimbatore city is 688 which are operated by TNSTC. Of these, 631 buses are on road. In addition to TNSTC buses there are 300 more private buses operating in Coimbatore.

Currently, the average daily ridership of city bus transport services is around 6.61 lacs (as per Comprehensive Mobility Plan for Coimbatore). But due to lack of scientific route rationalization process for complete bus system, city has lot of overlapping bus routes. With this exercise, the city envisions the overall improvement of city bus operations, increase in overall ridership on bus routes, rationalization of bus routes, identification of priority routes etc. The indicative bus route map of existing routes is given below.

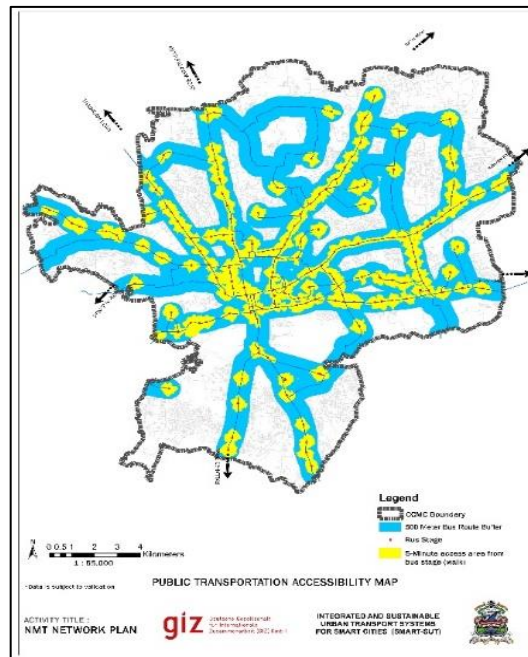


Figure 1 Public Transport Bus Routes of TNSTC

## Objectives of the assignment

The National Urban Transport Policy (2006) emphasizes to ensure safe, affordable, quick, comfortable, and reliable and sustainable access for the growing numbers of city residents to jobs, education, recreation and such other needs within our cities. NUTP encourages the greater use of public transport systems by offering the convenient service and explains the role of public transport systems in alleviating congestion, pollution and accordingly an easy and comfortable way of accessibility to the urban masses. It is well known that public transport occupies less road space and causes less pollution per passenger-km than personal vehicles. As such, public transport is a more sustainable form of transport. Therefore, we would promote restructuring in public transport as well as measures that make its use more attractive than in the past.

To achieve the objective of providing an efficient and effective public transport system (city bus system), there is a need to develop and reframe a proper system that can cater to short trips as well as long trips within the Coimbatore city.

The objective of the consultancy is to prepare a report for Route Rationalization Study and Improvement of City Bus Service for Coimbatore city and come up with a guideline or framework for cities such that institution's internal capacities could be developed, and this can be made as continuous process.

The scope of work for the route rationalization study includes:

1. Detailed assessment of the existing situation of the city bus services in Coimbatore
2. Assessment of the traffic demand in the city to suggest possible new routes and improve the coverage of the bus service
3. Suggest suitable measures to improve the performance and efficiency of the system considering the key technical and financial parameters of the city bus service
4. Training and Capacity building of the institution on rationalizing the routes

## **2. Tasks to be performed by the consultant**

The tasks to be undertaken for the proposed study has been categorized under 1) Existing Situation Assessment, 2) Route Rationalization Plan, 3) Service and Operational Plan and 4) Training and Capacity Building. The detailed description of these tasks is given below:

### **Task-1: Existing Situation Assessment**

- Define criteria for identification of the study area and finalise in consultation with partner agency and SMART-SUT
- Data collection from the bus agency and other stakeholders related to the existing routes which might include the bus schedule, technical and financial parameters, details of the fleet, ownership details, ticket sales data through way bills, network coverage data and data related to availability and use of private buses as well as IPT in the city, past studies undertaken such as comprehensive mobility plan, development plan/ master plan etc. Data collection should be comprehensive to show the variations w.r.t routes, days, seasons, peak and off-peak hours, bus type etc.
- Undertaking primary surveys after assessment of existing data available. To the extent possible, contractor is expected to capture the gender disaggregated data while collecting the primary data
- Assessment of the existing bus service in terms of the financial and technical parameters
- Mapping the routes, bus stops and other attributes including surveys on open GIS platform
- Assessment of the travel pattern and demand through the ticket sales data and primary surveys undertaken

### **Task-2: Route Rationalization Plan**

- Establishing objectives of the route rationalization plan based on the above assessment and identifying suitable indicators/indices for measuring the impact of the plan. The indicators/indices should be able to provide insights related to the coverage of route network, access to the population/employment, number the transfers, extent of overlapping of routes hence making the system cost effective, reduction in GHG emission, women safety etc.
- Assessment of indicators in case of Business as Usual (BAU) scenario
- Undertaking route rationalization based on the data obtained and the traffic demand established
- Framing of concept/criteria for the route rationalization plan, which may include trunk and feeder system/ hub and spoke/ ring radial route
- Development of new routes based on the proposed activity centre (connectivity to new town, village within the study area) and the estimated travel demand
- Suggest rationalization of private bus and IPT services across the city and define its role
- Route plan should include different typology of operation e.g. women only, AC/Non-AC, school special, mini/midi etc
- Suggest time horizon for the validity of the proposed plan considering the change in urbanisation, mobility patterns and proposed mass transit systems in the city

- Considering the proposed induction of e-buses in the city (tentatively 120 buses), proposed plan should also include suitable routes, charging infrastructure locations for e-buses without compromising the overall operational Key Performance Indicators (KPIs)
- Identification of location of proposed depot/ terminal based on the route network. For this, the contractor shall also refer to the proposals under the Development Plan/ Master Plan.

### **Task-3: Service and Operational Plan**

- Based on the above exercise, travel speed and cycle time, the route plan and the schedule for the bus service shall be prepared
- The fleet type and the fleet requirement shall be estimated based on the travel demand and the performance characteristics
- Based on the identified and proposed routes the impact indicators should be estimated and compared with the BAU scenario
- The contractor shall also suggest suitable recommendations for improving the data management systems for the bus service including capturing the gender specific data
- The contractor shall also provide suitable recommendations towards the institutional setup in place for providing the bus service.
- The suggestions may range from restructuring the institution in terms of the manpower requirement to ensure cost effective and efficient services, and reducing duplication of role and responsibilities

### **Task-4: Training and Capacity Building**

- During the inception of the study, Contractor is expected to suggest a strategy to involve the partner agency at each stage of the assignment for effective delivery and capacity development of the partner city.
- Contractor shall provide training to the officials regarding rationalization of the routes and how to institutionalize this within the routine processes of the public transport agency. In this regard, contractor shall prepare the training module for route rationalization process. Said training module should be user friendly, easy to understand and visually appealing. Training module shall be finalized after incorporating the suggestions received from the training programs and peer review by SMART-SUT project.

Certain milestones, as laid out in the table below, are to be achieved by certain dates during the contract term, and at locations:

<b>Milestone</b>	<b>Deadline/place/person responsible</b>
Submission of Inception report and work plan	0.5 month
Task-1 Report	2 months
Task-2 Report (excluding e-buses plan)	4 months
Task-2 Report on operation plan for e- buses	5 months
Task-3 Report (draft)	6 months
Task-4 Report Submission of Draft Training Module	7 months

Submission of Final Report along with the workshop report	9 months
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**Period of assignment: Nine Months (Expected to start from November, 2019)**

### 3. Concept

In the bid, the bidder is required to show how the objectives defined in Chapter 1 are to be achieved, if applicable under consideration of further specific method-related requirements (technical-methodological concept). In addition, the bidder must describe the project management system for service provision.

#### Technical-methodological concept

**Strategy:** The bidder is required to consider the tasks to be performed with reference to the objectives of the services put out to tender (see Chapter 1). Following this, the bidder presents and justifies the strategy with which it intends to provide the services for which it is responsible (see Chapter 2).

The bidder is required to present the actors relevant for the services for which it is responsible and describe the **cooperation** with them.

The bidder is required to present and explain its approach to **steering** the measures with the project partners and its contribution to the results-based monitoring system.

The bidder is required to describe the key **processes** for the services for which it is responsible and create a schedule that describes how the services according to Chapter 2 are to be provided. In particular, the bidder is required to describe the necessary work steps and, if applicable, take account of the milestones and contributions of other actors in accordance with Chapter 2.

The bidder is required to describe its contribution to knowledge management for the partner and GIZ and promote scaling-up effects (**learning and innovation**).

#### Project management of the contractor

The bidder is required to explain its approach for coordination with the GIZ project.

- The contractor is responsible for selecting, preparing, training and steering the experts (international and national, short and long term) assigned to perform the advisory tasks
- The contractor makes available equipment and supplies (consumables) and assumes the associated operating and administrative costs
- The contractor manages costs and expenditures, accounting processes and invoicing in line with the requirements of GIZ

The contractor reports regularly to GIZ in accordance with the AVB of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

The bidder is required to draw up a **personnel assignment plan** with explanatory notes that lists all the experts proposed in the bid; the plan includes information on assignment dates (duration and expert days) and locations of the individual members of the team complete with the allocation of work steps as set out in the schedule.

#### 4. Personnel concept

##### Eligibility requirements of the firm

- Please provide the legal status of your firm
- Average annual turnover for the last three financial years: at least 200.000 EUR
- Please provide at least 2 reference projects of your portfolio in the field of public transport planning with a minimum commission value of 20.000 EUR.
- 10 years of professional experience into Public Transport Planning

##### Technical Experience *(Refer: Assessing the eligibility of consulting firms)*

- Experience of 2 projects in city bus transport planning
- Experience of 1 project for route rationalization in bus operations
- Experience of 1 project in training/capacity building in transportation sector

The bidder is required to provide personnel who are suited to filling the positions described, on the basis of their CVs (see Chapter □), the range of tasks involved and the required qualifications.

The below specified qualifications represent the requirements to reach the maximum number of points.

##### Team leader – Public Transport Expert

###### Tasks of the team leader

- Overall responsibility for the advisory packages of the consultancy (quality and deadlines)
- Coordinating and ensuring communication with GIZ, partners and others involved in the project
- Personnel management, identifying the need for short-term assignments within the available budget, as well as planning and steering assignments and supporting local and international short-term experts
- Regular reporting in accordance with deadlines

###### Qualifications of the team leader

- Education/training (2.1.1): University qualification (Post-graduation or Equivalent) in Transport Planning/ Transport Engineering/any other relevant discipline
- Language (2.1.2): Good business language skills in English
- General professional experience (2.1.3): 20 years of professional experience in the public transport sector
- Specific professional experience (2.1.4): 10 years in public transport projects such as route rationalization, bus modernization plans, city bus improvement plans and other public transport studies such as BRT, city bus system etc.
- Leadership/management experience (2.1.5): 5 years of management/leadership experience as project team leader
- Regional experience (2.1.6): Experience of working in southern states of India
- Development Cooperation (DC) experience (2.1.7): Experience of working with multi-lateral/bilateral agencies like World Bank, ADB, GIZ, KfW, JICA, AfDB etc.
- Other (2.1.8): N.A.



## **Expert 1- Capacity Building Expert**

### Tasks of expert 1

- Preparation of training module and guidelines for route rationalization for the agency
- Organise workshops and provide training to the officials
- Prepare content for the workshop which includes brochures, presentations etc.

### Qualifications of expert 1

- Education/training (2.2.1): University qualification (Graduation or Post Graduation)
- Language (2.2.2): English proficiency is a must
- General professional experience (2.2.3): 7 years of professional experience in preparation of training modules and providing training
- Specific professional experience (2.2.4): 4 years of experience in preparing training modules and providing training in field of urban transport
- Leadership/management experience (2.2.5): Experience of leading workshops and training courses
- Regional experience (2.2.6): N.A.
- Development Cooperation (DC) experience (2.2.7): N.A.
- Other (2.2.8): N.A.

## **Expert 2: Transport Planner- I**

### Tasks of expert 2

- Coordination w.r.t. to all primary traffic surveys
- Coordination of secondary data
- Detailed analysis related to all primary and secondary surveys
- Overall day to day task completion exercise related to route rationalization

### Qualifications of expert 2

- Education/training (2.3.1): University qualification (Post Graduation or Equivalent) in transportation planning/transport engineering/ other relevant disciplines
- Language (2.3.2): English proficiency is a must
- General professional experience (2.3.3): 5 years of professional experience in the field of transportation planning
- Specific professional experience (2.3.4): Working experience on projects/studies related to traffic/transportation, data analysis, report writing etc.
- Leadership/management experience (2.3.5): N.A.
- Regional experience (2.3.6): N.A.
- Development Cooperation (DC) experience (2.3.7): N.A.
- Other (2.3.8): N.A.

## **Expert 3- Transport Planner II**

### Tasks of expert 3

- Identification of surveys to be undertaken
- Identification of the locations and the sample size for undertaking the surveys
- Monitoring the day to day progress of the survey
- Report preparation

### Qualifications of expert 3

- Education/training (2.4.1): University qualification (Graduation or Post Graduation) in transportation planning/engineering/ other relevant disciplines

- Language (2.4.2): Tamil will be preferred
- General professional experience (2.4.3): 3 years of professional experience in the field of transportation planning
- Specific professional experience (2.4.4): Experience in organising and monitoring traffic and transportation surveys, data analysis, GIS software and report writing for various transportation projects
- Leadership/management experience (2.4.5): N.A.
- Regional experience (2.4.6): N.A.
- Development Cooperation (DC) experience (2.4.7): N.A.

#### Soft skills of team members

In addition to their specialist qualifications, the following qualifications are required of team members:

- Team skills
- Initiative
- Communication skills
- Sociocultural competence
- Efficient, partner- and client-focused working methods
- Interdisciplinary thinking

## **5. Costing requirements**

### **Assignment of personnel**

Team leader: Assignment in country of assignment for **60** expert days

Expert 1: Assignment in country of assignment for **20** expert days

Expert 2: Assignment in country of assignment for **60** expert days

Expert 3: Assignment in country of assignment for **75** expert days

### **Travel**

The bidder is required to calculate the travel by the specified experts and the experts it has proposed based on the places of performance stipulated in Chapter 2 and list the expenses separately by daily allowance, accommodation expenses, flight costs and other travel expenses.

A tentative schedule of 20 domestic round trips (inclusive of travel to Delhi and Project cities) along with 50 nights of accommodation and 70 days of per diem has been envisaged by the GIZ.

- Economy class Airline tickets shall be procured by the contractor and reimbursed by GIZ against provision of receipts, flight tickets, and boarding passes.
- Accommodation will be arranged by contractor and shall be reimbursed by GIZ against provision of invoices

## **Workshops, training**

A 2-day workshop for providing training to the government officials on route rationalization is envisaged under the project. The structure of the workshop including number of participants will be decided in consultation with GIZ. Apart from this, the contractor will be responsible for –

- Developing workshop materials, brochures, agenda etc. in soft & hard formats (in consultation with SMART-SUT team)
- Communication with participants, making presentations, preparing minutes, follow-ups with participants etc.

Cost distribution for organizing the workshop will be as follows:

- Workshop logistics - Venue including lunch/dinner, stay and local travel of participants (SMART-SUT)
- Costs towards travel, boarding, lodging related to trainers/faculty/institutes (SMART-SUT)

## **Other costs**

NA

## **6. Inputs of GIZ or other actors**

GIZ and/or other actors are expected to make the following available:

- Introduction of the contractor to the city level stakeholders

## **7. Requirements on the format of the bid**

The structure of the bid must correspond to the structure of the ToRs. In particular, the detailed structure of the concept (Chapter 3) is to be organised in accordance with the positively weighted criteria in the assessment grid (not with zero). It must be legible (font size 11 or larger) and clearly formulated. The bid must be drawn up in English.

The technical-methodological concept as described in Chapter 3 shall not exceed 26 pages (excluding CVs).

The CVs of the personnel proposed in accordance with Chapter 0 of the ToRs must be submitted using the format specified in the terms and conditions for application. The CVs of each expert shall not exceed 4 pages. The CVs must clearly show the position and job the proposed person held in the reference project and for how long. The CVs must be submitted in English.

If any of the maximum page lengths is exceeded, the content appearing after the cut-off point will not be included in the assessment.

## **8. Option**

N.A.

**9. Annexes**

N.A.