

## Annexure 3

### **Draft Terms of Reference for annual Independent Environmental Audit**

#### **Background**

The Government of Karnataka has taken up the widening of the existing two lane State Highway between Hubli–Dharwad to a four-lane carriageway through the Karnataka Road Development Corporation Limited (KRDCL). To provide better transportation facilities and with a primary objective to improve travel speeds, reliability, and quality of public transport services, a Bus Rapid Transit (BRT) system has been proposed by further widening of the corridor. Hubli-Dharwad BRTS Company (hereafter called as the “Company”) has been formed to implement and operate the proposed BRT system. The proposed project has been developed with funding from the World Bank under Sustainable Urban Transport Program (SUTP).

The Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) for the BRTS corridor and other related infrastructure have been prepared in line with Global Environmental Facility (GEF)-SUTP’s Environmental and social Management Framework (ESMF). The project corridor has two EMPs-one for road component and the other for the BRTS component, and a consolidated EIA. The EMPs are included/ attached in the Bid Document for the contractor to implement the EMP on ground and the implementation is monitored/ supervised by Project monitoring consultants and PIU set up by the Company.

#### **Objective**

The objective of the assignment is to assess the status of implementation of Environmental management plans, identify constraints, if any during implementation, document best practices, if any and suggest measures for effective implementation and monitoring.

#### **Broad Scope of Services**

- To conduct an annual environmental audit for the construction period.
- To review the EIA and the EMPs and identify the key mitigation measures and monitoring requirements during the construction phase.
- To examine the records and documentation relating to impacts, actions taken to manage them and aspects of performance i.e. more specifically to review the reports prepared by the Consultant teams’ environmental specialists for the Roads and BRT components, reports of the PIU of the Company and World Bank Aide Memoires during each preceding audit period of one year.
- To conduct site observations at locations where construction activities are underway and at contractor facilities to check that environmental measures and controls are operating as described and intended.
- To conduct interviews with management and line staff of the Company, contractors’ personnel dealing with the implementation of EMP and the relevant personnel of the PMC to corroborate factual information and probe areas of concern.

- To review implementation status of recommendations/mitigation measures regarding design aspects of the civil works against safety, adequate location, arrangements for proper ventilation, lighting, provision of basic facilities for the use of workers/disabled staff etc.
- To assess the major environmental non-compliances and propose corrective actions.
- To assess the efficacy of monitoring of implementation of EMP and identify shortcomings, if any and areas for improvement.
- To identify constraints if any in ensuring compliance to the measures outlined in the EMP.
- To prepare and present the findings( draft report) to the Hubli-Dharwad BRTS Company limited and other stakeholders as agreed and finalised in consultation with by the Company. The report shall highlight constraints, if any during implementation; best practices, if any; areas requiring improvement in terms of implementation of mitigation measures indicated in the EMPs and the extent of effective monitoring by the PMCs etc, and suggest measures for effective implementation and monitoring of EMPs. The audit report will be prepared based on review of the above document, site observations, compliance of the statutory requirements and interviews with stake holders.
- Preparation of final report with suitable appendices etc after approval of the findings of the Draft report by the Company.

### **Qualification and Experience**

The consultant could be an individual consultant or an academic institution. The team conducting the audit shall have a lead auditor and an audit assistant.

**Lead auditor:** He/she shall have a post graduate degree in Environmental engineering or equivalent with a minimum of 5 years experience in the field. The responsibility of the lead auditor would be to plan the audit including assigning responsibilities to audit assistants, preparing questionnaires, checklist etc; finalising audit time schedules in consultation with the Company, efficient conduct of audit and completion of audit with the audit scope and within the time frame specified and preparing and submitting environmental audit reports to Hubli-Dharwad BRTS Company.

**Audit assistant-** He/she shall have a degree in environmental engineering and experience in the related field.

### **Assignment Duration**

The total duration of the assignment would be 10 weeks for the entire project construction period. The duration would be four weeks for the first year and three weeks each for the subsequent years.

### **Outputs / Deliverables for each audit period**

- Inception Report (with timelines for Audit site visits, interviews, questionnaires, checklists etc) within tendays from the issue of the work order.
- Draft report encompassing the observations relating to environmental audit.
- Final report after incorporating the suggestions of the Hubli-Dharwad BRTS Company Limited, if any.