

**GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH**

**MINISTRY OF LOCAL GOVERNMENT, RURAL DEVELOPMENT AND COOPERATIVES**

**LOCAL GOVERNMENT ENGINEERING DEPARTMENT**

**Program for Supporting Rural Bridges (SupRB)**

**TERMS OF REFERENCE (TOR)**

**FOR**

**TECHNICAL AUDIT (TECHNICAL, FIDUCIARY & SAFEGUARD)  
CONSULTANT**

**(Package no. - SD 40)**

**December 2019**

## Terms of Reference (TOR)

for

### Technical Audit (Technical, Fiduciary & Safeguard) Consultant

#### A. BACKGROUND

- 1.1. The Government of Bangladesh has received a loan from the World Bank (WB) towards the cost of the program titled “Program for Supporting Rural Bridges (SupRB)” (hereinafter referred as ‘the program’). The program will be implemented by the Local Government Engineering Department (LGED) through the Project Director’s Office (PMU) and contract administration of civil works will be carried out by LGED District/Upazila offices. The program will be implemented in total 61 districts of the country, except three hill districts at a cost of USD 614 million.
- 1.2. The program Components include (i) Major and minor maintenance of 85,000 meter of bridges; rehabilitation of 24,000 meter of bridges; Capacity Expansion (Widening) of 5000 meter of rural bridges; replacement or newly construction of 20,000 meter of bridges (on Upazila and Union roads only) (ii) Technical, fiduciary, procurement, social and environmental capacity improvement of LGED including design and implementation of climate resilient bridges and establishment and operationalize of Grievance Redress System (GRS). This program will provide continuous connectivity between agricultural production areas, growth centers and rural markets located in the program area and enhance earnings opportunities creating uninterrupted access to the commercial institution and basic services like health and education of the rural poor. The impact of the program will be reduced poverty in the intervention area.
- 1.3. A portion of program fund will be utilized for the services of a consulting firm for carrying out an integrated technical audit examining the adherence of the program to the technical, procurement and social and environmental standards and guidelines.

#### B. OBJECTIVE OF THE SERVICES

The main objective of this consultancy services under this terms of reference (ToR) is to allow a third party team to issue a professional opinion on the adherence of the program to the technical, procurement and social and environmental standards and guidelines. The detailed features of the review are described in Section C.

#### C. SCOPE OF CONSULTING SERVICES

##### (i) General requirement

Under the guidance of GoB and following the guidelines/Operational Policies (OPs) of the World Bank, the consultant will carry out their tasks in accordance with accepted professional standards, utilizing sound engineering, economic, financial and management practices.

The performance audit will be comprehensive, and include an analysis of the implementation process, reviewing both the results and activities that have been completed and those in progress. This will include examination of the quality of works executed, including the EMP, and compliance of bridge works with the technical specifications and standards described in the bidding documents; the consultant is also expected to make recommendations for improvements in program delivery.

The audit will be carried out **annually**. A sample of contracts covering minimum 10% representative sample of each type of ongoing contracts considering both cost and number would be selected by the consultant and audited.

## **(ii) Technical Audit**

The consultant will:

- Provide a simplified and quantified description of audited works. Review the quality and cost effectiveness of the design and accuracy of engineers estimate.
- Assess the quality of the works and their conformance with the standards and specifications, work plans and contract terms. The works quality shall be determined through visual examination and primarily, through non-destructive testing during the site visits. Destructive tests (core samples) will be used to support them.
- Compare a sample of the invoices for the unit prices and quantities with the contract prices and Bill of Quantities (taking into account approved variation orders if applicable).
- Infer and compare the material quantities claimed with the Bill of Quantities (as modified by approved variation orders), observed layer thicknesses and laboratory tests.
- Comment on the resolution of technical and/or contractual issues.
- Compare the works execution, time and costs, with the contractor's plan and performance. In case of work delays, evaluate the efficacy of corrective measures and the application of liquidated damage provided in the contract.
- Analyze and report cost overruns by type of work taking into account the total budget estimated.
- Examine compliance with the recommended actions agreed in the previous technical audit.
- Assess the quality of supervision by the Supervision Consultants.
- Confirm that authorizations, justifications and 'as built' designs and reception certificates are available in files.
- The Technical Monitor must flag and identify in the Deviation Report each measurement that deviates >10 % of the value, quantity or length, whichever applies, specified in the applicable standards or specifications.
- Review adequacy of quality control of construction and maintenance work.

## **(iii) Procurement Audit**

The consultant will-

- Verify the consistency and alignment of procurement practices and documents with the policies of the government (for procurement under PforR financing)/ World Bank (for procurement under IPF financing).
- Review outcome of the procurement process: The consultant will review the selection process of bidders and consultants of key procurement packages.
- Review Contract Management: The consultant will review key contracts to see the quality of contract performances by the consultant and suppliers. Moreover, consultant will review the settlement process of dispute, if any in the contract.
- Contract Implementation Risk: The consultant will identify the contract implementation risks and advise the PIU from audit perspective how to mitigate the risk in contract implementation.
- Review Contract Deliverable: The consultant will review the key output/deliverable of the procurement contract. The consultant will review contract deliverable, reports, specifically consulting firms/suppliers' activities under the purview of contractual obligations as defined in the contract.
- Review the resolution process of procurement related complaints, which will include review of the complaints vis-à-vis the respective procurement processes and documents.

## **(iv) Financial Audit:**

The consultant will-

- Carry out an internal control test to verify whether the internal control system of LGED is robust enough to provide a reasonable assurance that the program expenses are used for the purposes intended.

- Review 20% of the total transaction under the program from financial management perspective to see whether the country system was followed in all material respect.

**(v) Environmental Safeguards**

Monitoring on environmental issues, including field inspections and surveys should be carried out by the consultant to ensure that environmental protection requirements are being met. The monitoring and auditing will be based on the Environment and Social Management framework (ESMF) and subsequent Environment Assessment/Screening along with Environment Management Plan (EMP) of the subprojects. The audit will reconfirm that specific environmental requirements during construction are built into construction bidding documents and contracts and ensure, they are met (e.g. EMP, requirements for local hiring, penalty for not adhering to the EMP clause requirements etc.).

Auditing and monitoring programs are carried out to achieve the following results:

- to ensure the program is meeting the ESMF requirements;
- to gather information as per requirement of the ESMF and address the activities mentioned in the ESMF;
- to ensure the compliance of all environmental regulatory requirements;
- to ensure that the reporting requirements of ESMF are met;
- to test impact hypotheses, and to verify the predictions and assessment of environmental impacts, thus contributing to better assessments in the future;
- to evaluate the performance effectiveness of mitigation;
- to compare actual and predicted changes to the environment, so that immediate actions can be taken to mitigate unanticipated impacts. Review the design of the EMP, and that it reflects good professional practices in environmental conservation, including drainage patterns, slope stabilization, disposal of construction wastes, siltation in water bodies, degradation of scenic value and natural habitats and wildlife corridors, if any; and
- Recommendation and way forward.

**(vi) Social Audit and Evaluation**

The audit, in addition to overall project performance, will cover pertinent issues on land acquisition and resettlement focusing on social inclusion, and identify the problems to be addressed by LGED and the need for further mitigation measures. The consultant will carry out independent social audit and independent evaluation of mitigation measures for the program affected persons with special attention to women, tribal peoples and other vulnerable groups. The audit will review if the social safeguard measures adopted conform the requirements of ESMF.

The social audit will be carried out with annual performance audit and the evaluation will be carried at mid-term and at end-term of the project.

Social audit will cover the following tasks to review the ESMF objectives and procedures:

- Review specific monitoring indicators for undertaking monitoring for Resettlement action plans (RAP), Indigenous peoples plans (IPP) and Gender actions.
- Review and verify the progress in land acquisition/resettlement implementation of the Project, including implementation of the RAPs.
- Identify the strengths and weaknesses of the land acquisition/resettlement, approaches and implementation strategies.
- Assess the quality, timeliness and sufficiency of delivery of different categories of entitlements (compensation and rehabilitation measures).
- Review the results of internal monitoring and verify claims through sampling checks at the field level, involving affected people and community groups, to assess whether land acquisition/resettlement targets and objectives are generally being met.

- Monitor and assess the adequacy and effectiveness of the consultative process with APs, particularly vulnerable groups and women, including the adequacy and effectiveness of grievance procedures and legal redress available to the affected parties, and dissemination of information about these.
- Provide a summary of whether land acquisition and involuntary resettlement is being implemented (a) in accordance with the RAPs/PPs, and (b) in accordance with the stated policy.
- Describe any outstanding actions that are required to bring the resettlement activities in line with the policy and the RAP.

The consultant will carry out evaluation of the process and impact of the social safeguards management by mid-term and by end of project covering a 10% sample subprojects/contracts. The tasks for impact evaluation will be the following:

- Develop baseline of the project affected persons of sample subprojects. Review the policies and procedures for land acquisition and involuntary resettlement under SupRB, and the monitoring processes and their outputs, and summarize the results based on the available monitoring data.
- Evaluate and assess if compensation given to the PAPs and the livelihood opportunities offered are in line with ESMF, including for vulnerable women and IPs, and the effects on incomes as well as the quality of life of PAPs of program-induced changes.
- Identify the categories of impacts and evaluate the quality, timeliness and sufficiency of delivery of entitlements (compensation and rehabilitation measures) for each category in relation to the approved policy. Assess how the entitlements were used and evaluate their impact and adequacy to meet the specified objectives of the Plans.
- Review the results of internal monitoring and evaluate the claims through checks at the field level to assess whether land acquisition/resettlement objectives have been generally met. Involve the affected people and community groups, including vulnerable women and IPs, in assessing the impact of land acquisition.
- Evaluate the adequacy and effectiveness of the participatory and consultative process with PAPs, particularly vulnerable groups and women, including the adequacy and effectiveness of grievance procedures and legal redress available to the affected parties, and dissemination of information about these.
- Evaluate whether land acquisition and involuntary resettlement was implemented in accordance with the RAPs/PPs and assess whether the program social development goals were achieved and adverse impacts avoided.
- Identify the strengths and weaknesses of the land acquisition/resettlement implementation process, and lessons for future projects.

**(vii) Complaint and suggestion mechanism**

- Review performance of the complaint and suggestion mechanism.
- Review access to communication channels for community participation.
- Review that suggestions and grievances of the local stakeholders reached the PMU, were duly reviewed, sorted and considered and/or addressed.
- Provide a quantified assessment of the types of conflicts and grievances reported and resolved and the consultation and participation procedures.

**D. REPORTING REQUIREMENTS**

The consultant shall prepare the reports as described below. The reports will be provided in soft and hard copies (five hard copies).

**(i) Inception Report**

The consultant will submit an inception report based on the initial findings and confirm the methodology and work program by the third week after mobilizing. Based on the initial findings, identify any constraint and suggest solutions, together with any action required by LGED and other consultants involved in the program to facilitate the successful implementation of the consultancy.

## **(ii) Annual Report**

The report will be prepared based on site visits, review and analysis of issues (as outlined in the scope of services). The Table of contents of the Report will be submitted for Bank's clearance in the third month after mobilizing.

## **(iii) Consultancy Completion Report**

This report will be prepared at the end of the program. It will be a comprehensive report on the consultancy services throughout the contract. This report will summarize the constraints, lacking, achievement, lessons learnt and recommendation for future related to planning and design issue, contract execution issues and quality of works, as well as supervision and quality control issues. The Table of Contents of the Report will be submitted for the Bank's clearance six month before completion of the contract. The draft report will be provided to LGED one month before completion of the contract.

## **(iv) Safeguard Evaluation Reports**

The audit consultant will prepare a Baseline Report including (a) review the SupRB land acquisition/resettlement policies, objectives, implementation strategies and procedures; (b) design of evaluation methodology, sampling frame and field survey procedures; and (c) analysis of baseline data. Prior to program mid-term the consultant will expand the collection and analysis of base-line data, and conduct and analyze sample impact evaluation surveys including field consultations. Towards program-end the consultant will carry out all additional work necessary, including field data collection and analysis and field consultations, to complete the evaluation study.

At each of the three stages of the work the consultant will submit a draft report for review by LGED and the World Bank, and finalize the reports incorporating the comments and feedback received.

## **E. DATA AND SERVICES TO BE PROVIDED BY THE GOVERNMENT**

LGED will provide the Consultant with available data in soft or hard copy on;

- (i) All relevant studies related to the program, completed during preparation or implementation;
- (ii) Program Operation Manual (POM) updated as necessary;
- (iii) Environmental and Social Management Framework (ESMF);
- (iv) Design manuals, standard designs, and specifications as reference materials;
- (v) Documents pertaining to specific contracts;
- (vi) Data on recent improvement and maintenance cost;
- (vii) Maps of the country and its road network;
- (viii) Monthly, quarterly and annual report prepared by other consultants involved in the program.

## **F. TIME SCHEDULE**

It is envisaged that Consultants services will commence around June 2020 and end with project completion in August 2023. The staggered service input will be of 12 months with 3 months each year on an average, the duration of each annual audit determined based on the volume of ongoing works.

## **G. PROFESSIONAL STAFFING INPUTS**

All the Consultant's personnel shall be fluent in (i.e. writing, reading and speaking) the contract language, which is English. In addition, all the key staff described herein, shall be computer literate regarding word processing and spread sheets, with at least one staff member must have working computer knowledge with full time accessibility.

The Consultant shall provide competent personnel for the services, who shall be managed by the Team Leader and who will represent the Consultant in performing the services. The team shall comprise the following experts showing Table 1 but not be limited to:

**Table 1: Key Experts**

Sl. No.	Position	Qualifications & Experience	Number of position	Person-Months per position	Person-Months
1	Senior Bridge Engineer cum Team Leader	<p><u>Educational Qualification:</u></p> <ul style="list-style-type: none"> <li>- B. Sc. in Civil Engineering;</li> <li>- M. Sc. In Civil Engineering is preferable.</li> </ul> <p><u>Experience &amp; adequacy for the assignment:</u></p> <ul style="list-style-type: none"> <li>- Minimum 20 years of experience in bridge engineering;</li> <li>- 10 years of international experience;</li> <li>- Fully conversant with bridge construction, maintenance and rehabilitation practices and materials, their quality control methods;</li> <li>- Experience of working in the bridge sector for both private firms (contractors/consultants) and the public sector is preferable.</li> </ul>	1	12	12
2	Junior Engineer	<p><u>Educational Qualification:</u></p> <ul style="list-style-type: none"> <li>- B. Sc. in Civil Engineering;</li> </ul> <p><u>Experience &amp; adequacy for the assignment:</u></p> <ul style="list-style-type: none"> <li>- Minimum 5 years of experience in bridge engineering;</li> <li>- Fully conversant with bridge construction, maintenance and rehabilitation practices and materials, their quality control methods;</li> <li>- Experience of working in the bridge sector for both private firms (contractors/consultants) and the public sector is preferable.</li> </ul>	1	12	12
3	Procurement Specialist	<p><u>Educational Qualification:</u></p> <ul style="list-style-type: none"> <li>- At least graduate in Engineering/ Procurement / Supply Chain Management / Commerce/ Finance/ Business/ Management/Law/Environmental Science or suitable equivalency</li> </ul> <p><u>Experience &amp; adequacy for the assignment:</u></p> <ul style="list-style-type: none"> <li>- Minimum 15 years of working experience;</li> <li>- Minimum 10 years of experience as procurement specialist;</li> <li>- Experience of procurement auditing;</li> <li>- Experience of working in Bridge or Infrastructure projects.</li> </ul>	1	12	12
4	Environmental Specialist	<p><u>Educational Qualification:</u></p> <ul style="list-style-type: none"> <li>- B. Sc. in Civil Engineering/Environmental Engineering;</li> <li>- Master's Degree in Environmental Engineering/Environment Science will be preferred.</li> </ul> <p><u>Experience &amp; adequacy for the assignment:</u></p> <ul style="list-style-type: none"> <li>- Minimum 10 years of work experience as Environmental Engineer/consultant;</li> </ul>	1	12	12

Sl. No.	Position	Qualifications & Experience	Number of position	Person-Months per position	Person-Months
		<ul style="list-style-type: none"> <li>- Minimum 5 years of experience in Bridge or Infrastructure projects;</li> <li>- Work experience in projects financed by a multilateral financial institution is preferable.</li> </ul>			
5	Social Safeguard Specialist	<u>Educational Qualification:</u> <ul style="list-style-type: none"> <li>- Master's Degree in Social Science</li> </ul> <u>Experience &amp; adequacy for the assignment:</u> <ul style="list-style-type: none"> <li>- Minimum 10 years of relevant working experience;</li> <li>- Minimum 5 years' experience in Bridge or Infrastructure projects.</li> </ul>	1	12	12
6	Financial Management Specialist	<u>Educational Qualification:</u> <ul style="list-style-type: none"> <li>- <u>Master's in Accounting/Management/Finance or equivalent</u></li> </ul> -A professional accounting qualification (ACCA, CPA, CFA, CMA, CIMA or equivalent) is preferable. <u>Experience &amp; adequacy for the assignment:</u> -10(Ten) year experiences in financial management with preferably three years in a management position in any government / semi government/ multinational organizations/ donor funded development program - experience in application software and also in Computerized Accounting System is preferable.	1	12	12

## H. SUPPORT STAFF

The Audit Consultant will provide necessary support staff (data entry operator and office support staff) needed in order to carry out their tasks and fulfill their responsibilities effectively.

## I. SUPPORT SERVICES

The Consultant will include cost of office accommodation, operating costs for vehicles and communication services for the effective conduct of their assignment.

## J. CONSULTANT'S PERFORMANCE

The Consultant's performance will be measured following the indicators as per Annual Plan of Operation stated under:

- timely submission of inception report;
- timely submission of semi-annual report;



- timely submission of mid-term evaluation report on social safeguards;
- timely submission of end-of-project evaluation report on social safeguards;
- timely submission of completion report;
- timely informing LGED about any factors affecting the progress and quality of the project related to design and planning aspects, implementation aspects, and institutional aspects.

Once the Annual Plan of Operation is finalized, LGED will finalize the performance targets in agreement with the consultant. If the targets are not achieved LGED may retain 10 percent of the consultant's invoice for the respective period. When performance is not achieved, the consultant will prepare an action plan in consultation with the relevant parties involved in achieving the targets to catch up with the agreed performance targets. Money can be released when actions have been taken and performance has been achieved. Only when performance is not achieved, money will be forfeited.