## BANGLADESH: SECONDARY EDUCATION SECTOR INVESTMENT PROGRAM (SESIP Tranche 2)

#### Loan No. 3320-BAN

#### **TERMS OF REFERENCE**

#### for

# SD-50: Consultancy Services for Civil Works Compliance Verification (Supervisory Consultant for Civil Works)

#### A. Program Background

1. The Secondary Education Sector Investment Program (SESIP) was approved by Asian Development Bank's Board on 27 September 2013. Periodic Financing Request 1 (Tranche 1) for \$90 million (2013–2017) was approved by the ADB President on 21 October 2013. The loan became effective on 06 December 2013. The government's Development Program Proposal (DPP) was approved by the Executive Committee of the National Economic Council on 29 October 2013.

2. SESIP supports secondary education in Bangladesh over 10 years, using a multi-tranche financing facility (2013–2022). SESIP will support the implementation of key reforms envisaged in the National Education Policy (NEP), 2010 in a phased manner. The MOE has approved a 10-year Secondary Education Sector Road Map for implementation of the NEP. SESIP will also adopt a sector-wide approach that supports a government-led common secondary education program framework with enhanced harmonization of ADB and other development partner's assistance. The Ministry of Education (MOE) is the executing agency and the Directorate of Secondary and Higher Education (DSHE) is the implementing agency.

3. Under the Program massive infrastructure development including renovation and rehabilitation as vertical or horizontal construction of additional rooms or offices will be executed, total 79 packages under Trance 1 and 83 packages under Tranche 2. Under the first tranche of financing (2014-2017) a total of 640 schools are being identified to be used as ICT Learning Centers (ILCs) and in these schools facilities will be refurbished and decorated to answer the need of the ILCs, both from academic and security points of view. Also, 100 schools have been selected (mostly in disadvantaged areas) to be renovated in a first round. Environmental and Social Safeguards are being developed to be followed during the construction work. Under tranche 2 (2015-2017) an additional amount has been allocated for civil works. This includes, BEDU office, vertical/ horizontal extension of classrooms for Pre-vocational/Vocational training at 640 schools/institutions, construction of 25 Upazila/TSEOs offices, vertical extension of 60 DEO offices and new construction of Bandarban DEO office, vertical extension of NAEM Hostel etc. Planning of a completely new Shikkha Bhaban DSHE building has started and the construction and a good part of other works will be implemented under tranche 3.

4. The planned civil works are to be implemented by the Education Engineering Department (EED). On completion of each package EED will submit the completion certificate to the SESIP Authority.

5. The standardization of school and madrasah institution infrastructure and facilities is necessary for equitable access for all students. SESIP will support preparation of an Education Institution Construction Policy Guideline (EICPG). Based on current data from the DSHE Education Management Information System (EMIS), SESIP will work with EED to undertake an infrastructure needs assessment by reviewing and analyzing the current infrastructure and facilities status of each school and recommend minimum service standards for school/institution infrastructure and equipment. The assessment will provide the basis for preparing a comprehensive 5-year rolling prioritized Infrastructure and Facilities Development Plan (IFDP) consistent with the Secondary School Quality Standards (SSQS) approved by the Ministry of Education.

6. Priority will be given to improving schools/institutions in remote areas and those serving indigenous peoples and other marginalized groups. Upgrading of facilities will be a continuous process, with the first phase of 100 schools upgraded by 2017. Full implementation of the IFDP will take place under Tranche 3 (2018-2022) setting targets based on the procurement capacity assessment and EED procurement strengthening achievements.

7. SESIP is in the process of planning a national infrastructure needs assessment of all schools and madrasah. A firm will be engaged for verification of EMIS data to provide assurance that the EMIS data is sufficiently accurate to be used as the main source of information for the assessment.

## B. Purpose and Objective of the Assignment

8. The purpose of this Service Package SD-50, under Tranche 2 financing, is to carry out Civil Works Compliance Verification regarding infrastructure development and the quality, transparency and validity of supervision data to be used for quality assurance of civil works. The firm will also undertake field site visits on a sample basis for direct assessment of infrastructure development to verify materials and construction specification compliance, and compliance that includes compliance of environmental and social safeguards, where possible, in cooperation with the safeguard specialists to be engaged by SESIP.

9. A strategy/guideline for accurate collection and verification of supervision data will be proposed prior to taking up the work in the field. This is crucial for creating a reliable tool for following supervision of infrastructure interventions also in the future, under tranche 3 and beyond. As an outcome of the assignment, DSHE will have a better understanding of the degree of reliability of EED procedures, documentation, and certification. Any resulting recommendations for improved infrastructure development and civil works construction oversight practices will have to comply with PPR 2008 but may be documented as an integral part in the Infrastructure Development Plan.

10. The expected outcome of the consultancy is to have more reliable information available about civil works related supervision processes and overall progress. Proposals for supervision related improvements in EED procedures that may contribute to a higher quality implementation of the Infrastructure and Facilities Development Plan will be incorporated in the plans. However, this can only be proposed within the framework of existing government procedures.

## C. Implementation Arrangements.

11. A firm will be engaged through National Competitive Bidding (NCB) by Directorate of Secondary and Higher Education (DSHE) on open tender using Quality and Cost Based Selection – Biodata Technical Proposal (QCBS-BTP) to undertake the assignment. The firm will support SESIP with assistance and coordination from the SESIP Sector Program Support Unit (SPSU) and consultant staff. Main counterparts are MOE, DSHE, EED, SPSU, and Team Leader of SESIP. DSHE SPSU will coordinate the work. PMC consultants, especially the Senior Civil Engineer, will support as needed.

12. The duration of the consultancy will be for a total of 12 months, or until end of 2018, and the location of the assignment will be at Dhaka with frequent field visits to construction sites in Districts and Upazilas. The assignment is expected to start in the third quarter of 2017. There is a possibility for extension of the contract.

## D. Scope of the Service

- 13. The specific activities to be covered under the scope of the assignment are as follows:
  - a. Familiarize with the infrastructure development plans and all detailed civil works plans, as well as with EED standards of civil works, procedures for supervision of works, and submission of completion certificates;
  - b. Familiarize with the National Education Construction Policy Guideline (draft);
  - c. Familiarize with the DSHE EMIS data base and SSQS;
  - d. Categorize works packages based on the estimated timetable and geographical location;
  - e. Perform physical site visits to assess Civil Works Compliance Verification of 150 works sites according to the timetable. Site selection method and locations will be agreed with the client, but will geographically cover all of Bangladesh, including remote areas;
  - f. Discuss the status of overall progress and supervision on site with the contractors and supervising authority representatives. Discussions will also be undertaken as needed or required with local stakeholders, such as School Management Committees, Head Teachers, Guardians, etc.;
  - g. Clarify whether there are any emerging problems that need to be taken into account. Inform and discuss about the works and verification. Support the Supervision Committee with Completion Reports if/when needed;
  - h. Discuss about and verify that environmental and social safeguards are adhered to through physical inspection and discussions with relevant school and education authorities and immediate stakeholders;
  - i. In a limited sample of 25 institutions, also arrange discussions with Upazila officers, teachers, students, parents and surrounding community members and get their impression about the quality of work. Prepare brief reports presenting findings and recommendations;
  - j. Verify the handing over documentation and process for each sample schools, whether those were properly done following project and government requirements.

## 14. The sources of information are:

- a. EED documentation; infrastructure development plans, works contracts etc;
- b. Other relevant sources of information available with MoE and DSHE may be used.

15. A report will be produced by the consultant with presentation of the background and the results, including analysis of the findings of actual site visits of the educational institutions and proposals for adjustments and related justification for any changes in the supervision procedures carried out under EED. Any recommendations for improvement of EMIS and SSQS will also be included.

- 16. The following specific activities will be undertaken:
  - a. Initial desk work including: collecting relevant information from EED, supervision reports, completion certificates, designing the field work including timetables with geographical locations; developing approach and tools (to be approved by SPSU and SESIP Team Leader); plan discussions with local stakeholders and sampling of 25 institutions; collecting contact information and details about all locations and GPS data (if available) of each institution; contacting schools/madrasahs and District, Thana and Upazila offices were construction is planned, and inform them about the upcoming visits, and; plan the field work in detail;
  - b. Field work including site visits to minimum 150 construction sites. Discussing with Head Teacher and contractor's relevant staff to verify supervision data, carry out physical inspection and documentation, including photographs, of works and wherever possible, verify completion report. Discuss with staff, School Committee, parents, PTA and community around the sampled 25 schools;
  - c. Desk work including: analysis of collected data (and qualitative material from discussions), preparation of a quarterly and final reports with findings, recommendations and justifications for any proposed changes, and;
  - d. Presentation of the draft final report. Receiving and incorporating any comments on the draft report into a final report.

## E. Consultant Requirements:

Positions	Estimated Person-Months
Team Leader (TL) / Senior Engineer	12
Deputy Team Leader (DTL) / Quality Control and Contract Management Specialist	12
Supervision Technicians (2)	2 x 12 = 24
Total	48

17. Qualifications and Experience of the individual experts and related tasks are as follows:

## i. Team Leader (TL) / Senior Engineer : (National) 12 months

## **Qualification and Experience:**

Bachelor's Degree in engineering or other relevant subject area from a recognized University. 12 years of experience in the field of Civil Works supervision would be an asset. Preferably 8 years' experience in the field of civil works in education sector. 6 years of work experience in civil works supervision related to development partner funded projects is required.

## Tasks:

The main task of the consultancy assignment is to provide quality verification of the validity of supervision of civil works involving refurbishment and additional construction related to schools or educational office facilities. Therefore the TL will work closely with EED, SPSU and the SESIP Senior Civil Engineer to design a verification tool to be used throughout the assignment. The same tool may be revised during the process and later finalised and included in the EICPG and Infrastructure Development Plan. He/she will lead, guide and support the team with necessary oversight for all verification process related activities including but not limited to undertaking exchange of views and sharing information with other experts of the program and representatives of the Client. The tasks, among others, will include effective planning, management, coordination and reporting of all work. The detailed tasks shall be: (i) establish the team, coordinate, and monitor communication channels with specialists and counterparts from MOE, EED and DSHE for accessing and collecting all the relevant data; (ii) study all available background information like work packages and timetables, supervision rules and procedures; (iii) prepare the plan, approach, and timetable for the work, (iv) support preparation of a simple data base for information management; (v) undertake field verification site visits; (vi) guide, monitor and supervise the team both in office and field based work; (vii) ensure quality of all outputs through random spot checks of the work of the teams; (viii) provide oversight and monitor the progress of data collection and reporting; (ix) participate in meetings, and; (x) prepare required reports.

## ii. Deputy Team Leader (DTL) / Quality Control and Contract Management Specialist, (National) 12 months

## Qualification and Experience:

Bachelor's Degree in engineering or other relevant subject area from a recognized University. 08 years of experience in the field of Civil Works supervision would be an asset. Experience in the field of education infrastructure (multistoried school buildings) will be preferable. Knowledge of ICT based data collection and management as well as familiarity with mobile phone based data transfer and storage would be an asset. **Tasks:** 

The Civil Engineer will assist the TL in designing the tools and leading the team throughout the supervision verification work, especially with detailed planning and managing all field activities including undertaking exchange of views and sharing information with contractors and representatives of the Client. The tasks, among others, will include responsibility for detailed planning, management and coordination of all stages of the supervision verification field based work. The detailed tasks shall be (i) communication with specialists and counterparts from MOE,

DSHE and EED for accessing all the relevant data; (ii) prepare, together with TL the design, plan, approach and timetable for the work; (iii) develop ICT based tools for storing and transporting of data; (iv) undertake field verification site visits; (v) guide, monitor and supervise the team, especially in field based work and participate in at least 20% of the work in selected sites; (vi) ensure quality of all outputs; (vii) monitor the progress of data collection;(viii) guarantee the validity of all data and assist the TL in making the data available in useful form for regular reports; (ix) participate in meetings and assist TL in preparation of reports, and (x) carry out any other duty as required by the TL.

## iii. Supervision Technicians, (National) 2 x 12 months

#### **Qualification and Experience:**

Diploma in Civil engineering or related field from a recognized institution, having at least 7 years of experience working with civil works supervision in Bangladesh. Experience form working with works supervision in the education sector would be preferable.

#### Tasks:

- (i) Carry out the field work related to verification of the supervision and completion reports of the sites according to plan;
- (ii) Assist in compiling the data into reports, and;
- (iii) Carry out any other duties given by the TL or DTL.

#### F. Deliverables.

- 18. The Consultant Firm shall deliver the following reports:
  - (i) Inception report with study design and work plan: In the 2<sup>nd</sup> week of the assignment.
  - (ii) Quarterly verification reports
  - (iii) Draft Final Report: In the second week of the last month of the assignment.
  - (iv) Final Report: In the last week of the last month of the assignment.

#### G. Client's Inputs and Counter-part Personnel

(a) Access will be provided to all relevant data available with SESIP, EED and MOE for carrying out the work.

(b) Professional and support counterpart personnel to be assigned by the Client to the Consultant's team: