

Terms of Reference (TOR)
for
Consulting Services for Conducting Social Value Assessment Surveys, Preparation, Upgradation and Implementation of Resettlement Action Plans and Environmental and Social Safeguard Supervision and Monitoring For the Proposed Grid Substations and Transmission Lines under Dhaka and Western Zone Transmission Grid Expansion Project (DWZTGEP)

1. Introduction:

The demand of electricity is increasing rapidly in Bangladesh. To meet this growing demand of electricity all over the country, massive plan has been taken to install power plants throughout the country. Some of these plants have started to come into operation. Considering the upcoming generation plants, a study of the transmission network has been done and it has been found that a considerable numbers of grid substations and transmission lines will be overloaded. Also, a number of existing grid substations are having difficulties for aged equipment's and unconventional designs.

These substations require required renovations and modifications from small scale to large scale. Moreover, the maximum demand of electricity is expected to be 40000 MW in 2030 according to the Power System Master Plan (PSMP)-2016. To supply this huge demand, new 400/230/132 kV, 230/132 kV&132/33 kV substations will be required all over the country.

In view of that, Power Grid Company of Bangladesh Ltd., with support from the Asian Development Bank (ADB) and Asian Infrastructure and Investment Bank (AIIB) will implement a project named **“Dhaka and Western Zone Transmission Grid Expansion Project (DWZTGEP)”**. The objective of the project is mentioned below:

1. To supply the growing demand of the country.
2. To ensure reliable power supply to rural area.

For environment and social safeguards, due diligence has been conducted, and an initial environment examination (IEE) and resettlement plan (RP) have been prepared for environment and resettlement respectively and disclosed on the ADB website.¹

However, based on the final line route, PGCB should review the final design and confirm if any change in alignment that would require an update of the IEE/EMP documentation – only if there is a change in design or unanticipated impact does it need to be updated. Also, a detailed social impact assessment has to be completed to prepare update RP. After approval of the updated RP, by ADB, the Consulting Firm will implement it along with EPC Contractor and PGCB during construction of the physical activities of the subprojects.

As per the Environmental Conservation Rule (ECR) 1997 and the requirements of the ADB Safeguard Policy Statement (SPS) 2009, the project should be implemented in compliance with all the applicable Environmental and Social Rules and Regulations of Bangladesh as well international treaties, conventions, and agreements Bangladesh is a signatory to. It also needs to be implemented in accordance with the project's environmental and social management and monitoring requirements described in the IEE/EMP and RP. Total resettlement activities are expected to be completed within 30th June 2024.

¹ <https://www.adb.org/projects/51137-003/main#project-documents>

2. Objective of the Assignment:

- (i) The objective of the consultancy services is to implement the safeguard requirements in accordance with the social and environmental safeguard policies of the ADB, other relevant corporate guidelines and the relevant laws and regulations of the Government of Bangladesh, for the construction and operation of the new transmission lines, sub-stations and associated facilities under the project. The main objective of this consultancy work is to assist PGCB's PMU implement the RP and to undertake environmental and social safeguards supervision and monitoring of IEE/EMP and RP implementation by PGCB and the Contractors to ensure the project is implemented in compliance with the IEE/EMP and RP. The environmental and social supervision and monitoring program will identify areas of potential or actual non-compliance by PGCB and the Contractors and, if required, the corrective actions needing to be taken to rectify defects or deficiencies. The consultant shall prepare, on the behalf of PGCB Ltd. route survey together with Topographic Survey team, and update the RP and the IEE/EMP (if needed). The consulting survey will also enable PGCB to provide ADB with the requisite semi-annual environmental and social monitoring reports for the transmission lines and sub-stations of the project. The consultant shall prepare/update specific and Resettlement Action Plan/s (RAP) including costing and ensure and assist implementation of RAP.

3. Scope of Work

In accordance with relevant policies, in particular with the relevant laws and policies of Bangladesh and ADB, the consultant will undertake tasks including but not limited to the following:

Resettlement

- i. For land acquisition of substation sites, reconcile census and joint verification data of each affected household within the land acquired for substations as per the final design; identify affected structures, trees and crops with number of the affected households/persons; and collect land acquisition schedule and plot index approved by Deputy Commissioner through PGCB.
- ii. For transmission lines, carryout route survey together with topography survey team along with final routes; estimate each affected household within the proposed RoW as per the final alignment from contractors; identify affected structures, trees and crops with number of the affected households/persons.
- iii. Identify vulnerable entitled households/persons and severely affected households/persons (losing more than 10% of their productive assets and/or residential structures) for providing additional assistances.
- iv. Collect and computerize all resettlement related data, including land acquisition and census to prepare a resettlement databank and prepare GIS map based on the KMZ file.
- v. Maintain relevant pictures, files and records of the affected households/persons.
- vi. Prepare implementation timeline including livelihood restoration implementation plan timeline as per ground situation.
- vii. Update RP based on the latest data and information collected.
- viii. Prepare entitlement cards/compensation agreements for each affected household. The selected Consulting Firm will assist PGCB in processing entitlements for the entitled persons (EPs) and making payment of compensation/resettlement benefits to them. The Consulting Firm will compile & process data and develop & operate a menu driven computerized Management information System (MIS), prepare Entitled Persons' (EP) files with type and quantity wise losses and Entitlement Card (EC)

mentioning amount of compensation/benefits for each of the EPs and prepare indent mentioning category wise amount of compensation/benefits.

ix. Guide affected households/persons on relative entitlements and benefits of each option as mentioned in the RP especially in the entitlement matrix and Rehabilitation and Restoration package (R&R) sections and advise how to use their compensation money in productive ventures.

x. Help affected persons in opening of their bank accounts for compensation and advise them how to arrange credit/grants for income generation or livelihood restoration as needed.

xi. Assist affected households/persons in identifying and selecting alternative place/land/location for resettlement as needed.

xii. Facilitate linkages with relevant agencies such as the department of agriculture or department of agricultural extension services for affected persons to participate and benefit from tree planting programs or programs that introduce alternate crop varieties including related training programs conducted by those agencies.

xiii. Monitor the timely disbursement of compensation and other entitlements and verify that the amount is provided at replacement cost based on the fare market rate as per the RP.

xiv. Review and appraise the already completed social impact assessment studies from a social impact/risk aspect and recommend the most feasible process of payment of compensation along the RoW for loss of assets (crops, trees, structure etc) following the ADB safeguard policies and Government's policies in consultation with PGCB (TL route and Substation location in an annexture-1)

xv. Determine the replacement costs of all categories of losses; and prepare a Resettlement Action Plan (RAP) for payment of compensation for losses along RoW of the transmission lines and substation locations with specific sourcing and approval process. Monitor and assist the process of compensation payments to ensure that the process is following the ADB guidelines.

Environment

i. Review the environmental management and monitoring plans contained in the national EIA report(s) as compared to the project IEE/EMP and the contract documentation, reconcile the mitigation and monitoring measures that are to be implemented, the most stringent requirements are to be followed by PGCB and the Contractors; changes to mitigation and monitoring requirements including indicators, methods, locations, timings and frequency are to be incorporated into the PMU and/or the Contractor's work plan;

ii. Review the final designs to confirm if there has been any change in alignment, if there has been a change in route make a recommendation on the need to update the IEE/EMP documentation for PGCB to seek ADB's confirmation;

iii. Review and confirm the final designs adequately incorporate national requirements and all IEE/EMP measures, as well as conforming with the IFC EHS General and Transmission/Distribution Line Guidelines requirements, prior to the final designs being approved by PGCB;

iv. Undertake confirmatory audits of existing facilities (substations) to determine if the corrective action plan which is set out in the IEE has been complied with before the Contractors are given access to the substations sites; if not, guide PGCB in the corrective actions to be taken;

v. Review the Contractor's preconstruction documentation as required by the IEE/EMP and confirm it adequately incorporates national requirements and all IEE/EMP measures, as well as conforming with the IFC EHS General and Transmission/Distribution Line Guidelines requirements, prior to it being approved by PGCB;

vi. Review and confirm the Contractor has obtained all relevant environment, health and safety clearances and permits prior to PGCB granting approval to commence construction works; and

vii. Once construction has commenced undertake monthly spot check site visits to each contract (seeking to visit all operational construction sites at least quarterly) to check activities and adequate implementation of national requirements and IEE/EMP measures and, advise PMU staff and the

Contractors if improvements are needed, document all site visits undertaken in a field visit note, including completion of checklists and photographs;

viii. Undertake spot-check/random consultations with affected communities to identify any concerns about environmental nuisance and with construction workers to identify any occupational health and safety/labor concerns; and

ix. Oversee quantitative environmental monitoring activities by contractors, to ensure adequate pre-construction baseline to monitor against, confirming appropriate methodologies being used and results correctly interpreted.

Both for Resettlement and Environment

i. Support PGCB and PMU staff in ensuring compliance with loan covenants related to environmental and social safeguards.

ii. Support PGCB to publicize project notifications, carry out ongoing meaningful consultations (whilst ensuring the safety of all concerned with respect to COVID-19) and disseminate environmental and social information including the assessment, supervision and monitoring findings, through booklets and posters distributed in the project affected areas and communities.

iii. Support PGCB, PMU staff and the EPC Contractors to undertake community awareness raising activities with particular emphasis on community health and safety issues associated with transmission infrastructure.

iv. Support PGCB to establish the environmental and social Grievance Redress Mechanism (GRM) and form a grievance redress committee (GRC) including providing training for committee members, implement the GRM with proper record keeping of all grievances however minor and support PGCB and EPC Contractor in promptly responding to any grievances raised.

v. Liaise with various officials of government, PGCB, PMU staff and the EPC Contractors to ensure they fully understand national requirements, international good practices for environmental management, and the IEE/EMP and RP measures to be implemented during pre-construction, construction, and operation, including provision of formal training and capacity building activities to help them understand ADB SPS (2009) and the IEE/EMP and RP requirements and fill any capacity gaps identified.

vi. Provide environmental and social safeguards inputs to the quarterly project progress report (QPR) to be submitted by PGCB to ADB.

vii. Supervise and monitor the implementation of the IEE/EMP and RP and prepare semi-annual environment and social monitoring reports for submission by PGCB to ADB in the first week following completion of the period, including time-bound corrective action plan (e.g. end of December, end of June).

viii. Update the IEE/EMP and RP as necessary if any unanticipated impacts (including project scope or design changes) occur during project implementation, such updates should be submitted by PGCB to ADB for clearance and disclosure on the ADB's website.

ix. If there are concerns or non-compliance events, discuss with PGCB the issues/problems arising and prepare a corrective action plan with necessary actions to be taken by PGCB and the EPC Contractors for approval by ADB in order to bring the project back into compliance with national requirements and ADB SPS 2009. Immediately report to PGCB to inform ADB within 24 hours any major concerns identified, such as, fatalities.

x. On project completion produce a final report detailing the history of environmental and social performance on the project and final compliance of the project with the IEE/EMP and RP requirements.

4. Staff requirements

The Consulting Firm which shall be national one, is free to determine the number of members working in the team. Contract type will be lump sum contract. The consulting firm shall have at least 10 years

of experience in the implementation, supervision and monitoring of environmental and social safeguards plans on major construction projects including transmission lines and substation construction. The firm shall have environmental and social consultants with relevant qualifications and expertise. Experience in implementing similar projects in Bangladesh supported by multilateral financial institutions will be an advantage. The approach and methodology for implementing the TOR, the qualifications and experience of the consulting firm and its individual experts will need to be detailed by each shortlisted firm in their proposal. The team composition of the key individual experts to be provided, along with an estimate of their person months is provided in Table 1.

Table 1. Indicative Expertise

Type of staff	Minimum educational qualification	background	Overall experience	Specific experience and responsibilities
Social Development Specialist (Team leader, 10 person months)	Master degree	Masters in anthropology, sociology, applied social science, or other related fields. But bachelor's degree combined with specialized experience in similar organization/s, may be considered in lieu of a master's degree.	At least 10 years experience in the relevant field	The Team Leader is the spokesman for the Consulting Firm. He/She shall have relevant experience in preparation and implementation of RP, report writing etc. and must be fluent in English. He will maintain liaison with PGCB officials
Environment, health and safety specialist (deputy team leader, 4 person months)	Master degree	Masters degree in environmental science, environmental management, or other related field. But bachelor's degree combined with specialized experience in similar organization/s, may be considered in lieu of a master's degree. An internationally recognized formal construction health and safety qualification e.g.	At least 10 years experience in the relevant field	The specialist will supervise and monitor implementation of the IEE/EMP and will take responsibility for reporting to PGCB with relevant environment safeguard deliverables. As deputy team leader, specialist will also support the team leader in managing and coordinating the inputs of the environment team members and in consultation with the team members, PGCB, Contractors, and communities, providing all environmental safeguard deliverables required under the contract.

Type of staff	Minimum educational qualification	background	Overall experience	Specific experience and responsibilities
		IOSH or NEBOSH is beneficial.		
Communication Specialist (4 person months)	Bachelor Degree	Preferably Social Studies	At least 10 years experience in the relevant field	The specialist will undertake activities related to environmental and social safeguards consultation and grievance redress such as supporting information dissemination; preparing booklets, posters, brochures, fact sheets, and FAQs for the project; updating social media, if any; supporting the PMU with carrying out meaningful consultations, logging and responding to grievances; and providing training to the GRC. The specialist will provide guidance and inputs to the PMU as needed and build and maintain close ties with affected communities, local government representatives, and local media organizations. The specialist will report to the team leader on the progress of communication related issues on a regular basis.
Social field officers (4 nationals, total 36 person months)	Bachelor degree	Preferably Social Science	At least 5 years experience in the relevant field	The field officers will be responsible for socio economic survey, collecting and supporting information dissemination including consultations. Also, the field officers will educate the affected people on the entitlement and provide livelihood support. The field officers will take the lead in preparation including development of methodology, protocols and questionnaires and administration of the socio-economic survey. In addition, the field officers work as a liaison between PMU and relevant agencies to undertake

Type of staff	Minimum educational qualification	background	Overall experience	Specific experience and responsibilities
				these surveys. The field officers will recruit, train and prepare enumerators for conducting the surveys and take lead in data analysis, presentation and finalization of the survey findings in a format acceptable to PMU and ADB. Lastly, the specialist will provide inputs for the team leader to each report. He/she will assist MIS Specialist in preparation of data in tabular format.
MIS specialist (3 person months)	Bachelor degree	Computer Science/Mathematics/Statistics	At least 5 years experience in the relevant field	Will be responsible for updating/preparation of user-friendly menu driven software as per survey forms for computerization, editing and analyzing of data. Create data entry screen and ensure data entry without error. Prepare report in tabular format as approved by PGCB. Updating/ modifying table as per demand of PGCB is also responsibility of the MIS Specialist.
Data entry/Computer operator (3 person months)	Minimum graduate	Any Discipline	At least 5 years experience in the relevant field	Will be working under guidance of the MIS Specialist and insert data following data entry screen prepared by MIS Specialist. He will supervise coding of data and will ensure error free data entry.
Environmental, health and safety field officers (2 nationals, total 12 person months)	Bachelor degree	The field officers must have a Bachelor in environmental science, environmental management, health and safety management or other related field, together the four officers must have	They must have at least 5 years' experience in carrying out environmental, health and safety supervision, monitoring and implementation of EMPs for construction of major	The field officers will be responsible for supervision and monitoring of the IEE and EMP. The field officers will conduct monthly spot check site visits (at least quarterly to all operational construction sites) and provide inputs for the deputy team leader to draft the inception report, semiannual monitoring reports and other reports required under the ToR.

Type of staff	Minimum educational qualification	background	Overall experience	Specific experience and responsibilities
		qualifications and experience covering pollution management, health and safety management, and biodiversity management.	infrastructure projects, preferably in the power sector.	

5. Deliverables

Table 2. Indicative List of Reports

No	Activity	Due by Month
1	Inception report with survey and reporting plan, and methodology	1
2	Draft social impact assessment report including socioeconomic, census, inventory of all permanent and temporary assets and income losses by substations and along the RoW of the transmission line and estimation of compensation of all losses following RP and the government of Bangladesh's laws and policies.	xx
3	Final inventory of loss and estimated compensation, and manual on process of payment of compensation. DVD of video filming (two copies) to be submitted by the end of week four after filming. The video filming will cover all structures within the right of way/selected area and will be edited as per instruction of the PMU.	xx
4	Updated resettlement plan	xx
5	Summary of environment and social safeguards implementation status as an input to quarterly project progress reports	Quarterly
6	Semi-annual environmental and social monitoring reports including details on compensation payment and certification	Semi annually

The selected Consulting Firm will design tabular and other formats appropriate for reporting. To the extent possible, the tables will have to be preprogrammed in the menu-driven MIS and the quantitative reports will have to be generated directly. Database and outputs would be delivered to

the PMU with user friendly menu driven software after completion of each assignment. For semi-annual environmental and social monitoring reports ADB template will be adopted.

11.0 Duration of Engagement

The duration of the consultancy is 36 months up to completion of project from the signing of the contract or the date of actual completion of payment of compensations. Minimum man-month that the firm shall be engaged is 72.

Detail of RAP Implementation Schedule and Tasks for Substations and TLs

Project includes 15 substations, 20 nos. bay extension at 9 existing substations, 3 nos. 400kV TL/LILOs (total 22km), 8 nos. 230kV TL/LILOs (total 144km) and 12 nos. 132kV TL/LILOs (total 242km) are as follows:

1. 400/230 kV Indoor GIS Substation at Kaliganj (Gazipur)
2. 400/230 kV Indoor GIS Substation at Purbachal-1
3. 230/132 kV Indoor GIS Substation at Purbachal-2
4. 230/33 kV Indoor GIS Substation at Bhola
5. 230/132/33 kV Indoor GIS Substation at Rupsha.
6. 132/33 kV Indoor GIS Substation at Phultola.
7. 132/33 kV Indoor GIS Substation at Monirampur.
8. 132/33 kV Indoor GIS Substation at Maheshpur.
9. 132/33 kV Indoor GIS Substation at Meherpur.
10. 132/33 kV Indoor GIS Substation at Domar.
11. 132/33 kV Indoor GIS Substation at Hatibandha.
12. 132/33 kV Indoor GIS Substation at Shibchar.
13. 132/33 kV Indoor GIS Substation at Bhanga.
14. 132/33 kV Indoor GIS Substation at Jhalokathi.
15. 132/33 kV Indoor GIS Substation at Pirojpur.
16. Four nos. 132 kV AIS Bay Extension at Satkhira Substation,
17. Two nos. 132 kV AIS Bay Extension at Kaliganj Substation,
18. Two nos. 132 kV AIS Bay Extension at Bagerhat Substation
19. Two nos. 132 kV AIS Bay Extension at Kushtia Substation.
20. Two nos. 132 kV AIS Bay Extension at Patnitola Substation
21. Two nos. 132 kV AIS Bay Extension at Niyamatpur Substation,
22. Two nos. 132 kV AIS Bay Extension at Gopalganj Substation,
23. Two nos. 132 kV GIS Bay Extension at Purbasadipur Substation
24. Two nos. 132 kV GIS Bay Extension at Bhandaria Substation.
25. Kaliganj - Purbachal 400kV double circuit line: 18 km
26. LILO of Kaliakoir - Bhulta 400kV double circuit line at Kaliganj : 0.5 km
27. LILO of Tongi -Ghorasal 400kV (charged at 230kV) double circuit line at Kaliganj : 3.5 km.
28. River Crossing portion of Purbachal 400 kV - Purbachal-2 230 kV double circuit line: 0.5 km.
29. LILO of Tongi -Ghorasal 230kV double circuit line at Kaliganj : 3.5 km.
30. Purbachal 400 kV - Purbachal-2 230 kV double circuit underground cable line : 5km.
31. Satkhira-Rupsha 230 kV double circuit line (initially charged at 132 kV): 62 km.
32. LILO of Rupsha Power Plant- Khulna (S) double circuit 230 kV Line at Rupsha Substation: 0.5 km.
33. Purbasadipur-Domar 230 kV double circuit transmission line : 46.5 km.
34. Gopalganj (N)-Shibchar 230 kV double circuit line: 25 km.
35. LILO of Barishal-Bhola-Borhanuddin double circuit 230 kV Line at Bhola substation : 1 km.
36. Rampura- Bashundhara 132kV double circuit underground cable line: 9 km.
37. Satkhira-Monirampur 132 kV double circuit line: 33 km.
38. Kaliganj-Maheshpur 132 kV double circuit line: 28 km.
39. Kushtia-Meherpur 132 kV double circuit line: 48 km.
40. LILO of Goalpara-Bagerhat 132 kV double circuit line at Rupsha: 3.5 km.
41. LILO of Gopalganj-Gallamari 132 kV double circuit line at Rupsha: 0.5 km.
42. LILO of Noapara-Khulna Central double circuit 132kV line at Phultola: 1 km.
43. Niyamatpur-Patnitola 132 kV double circuit line: 32.5 km.
44. Domar-Hatibandha 132 kV double circuit line: 35 km.
45. Bagerhat-Pirojpur-Bhandaria 132 kV double circuit line: 49.5 km.
46. LILO of Madaripur- Faridpur 132 kV double circuit line at Bhanga: 0.5 km .
47. LILO of Barishal-Bhandaria double circuit 132kV line at Jhalokathi: 1.5 km.