

## **TERMS OF REFERENCE**

### **REGIONAL POWER TRANSMISSION INTERCONNECTION PROJECT (TAJIKISTAN)**

1. An international team of consultants (the consultant) will be responsible for the Executing Agency (the EA) to develop and implement a comprehensive project management plan to ensure the most efficient, timely and economical implementation of the Project. This plan should take into consideration the engineering technology required, the resources and costs involved, and the critical time frame for completion of the Project.
2. The consultant will be responsible during pre-construction phase for conceptual design, elaboration of technical specifications, and tender documents. He will bring his assistance to the EA in the evaluation of the bids and preparation of bid evaluation reports to be submitted to ADB and other co-financiers. He will provide expertise during implementation phase including making recommendations for testing, and commissioning of all components of the Project.
3. **Pre-construction phase** The consultant will be responsible for:
  - (i) Conducting field visits of the project sites and will collect all necessary data for carrying out the conceptual design. Special care will be taken during data collection as well as during conceptual design with the interfaces between existing and new equipment. Close cooperation between the consultants in Afghanistan and in Tajikistan is required for the preparation of the Lot 1, which consists in the construction of the transmission line and substations both in Afghanistan and Tajikistan.
  - (ii) Reviewing soil tests and foundations calculation for the HV substations and transmission lines to ensure that they can be reused with new equipment; review the structural design of gantries and towers in order to ensure their capability to handle supplementary loads.
  - (iii) Reviewing existing studies and prepare a detailed design study report including, main characteristics of new equipment, drawing (general layout cross section drawing, line profile, single line diagrams, foundations and steel structure calculations and other studies such as insulation coordination as required, detailed cost estimates with bill of quantities, implementation schedule, procurement packaging. The report shall provide sufficient details as to be used as a basis for the preparation of technical specifications and tender documents.
  - (iv) Preparing upon approval of the conceptual design report, the tender document in accordance with ADB's *Procurement Guidelines* and its co-financiers' standards and procedures.
  - (v) Assisting the EA during the tendering period, including but not limited to: organization of site visits, assistance during pre-bid meeting, clarification of tender documents, bid opening and bid evaluation. For the Lot 1 on the construction of transmission line and substations in Afghanistan and Tajikistan, the pre-bid meeting, opening of the bids and bids evaluation will be carried out jointly by the Project Implementation Unit (PIU) of both countries. The consultant will thus have to liaise closely with its counterpart in the other country. It is

anticipated that the pre-bid meeting and the bid evaluation will be carried out in Tajikistan.

- (vi) Participating in the contract negotiations. For Lot 1, it might be possible that the contract negotiation be conducted jointly between Afghanistan and Tajikistan in case of a single successful bidder for the entire line.
- (vii) Along with the preparation of final detailed design, review the changes in design affecting the Resettlement Plan (RP) and the Environmental Management Plan (EMP), assess whether a new Affected People (AP) census and impacts assessment is needed, and if so, carry out the new surveys and update the RP detailing appropriate and possibly additional compensation entitlements fitting ADB's resettlement policy requirements, impact figures and costs accordingly. Ensure that the approval of the contractor's contract is preceded by the review/update of the RP. Also ensure that no construction takes place before the compensation program detailed by the RP is fully implemented and ADB provides no-objection to contractors mobilization..
- (viii) Assist during preparation of contract documents.

4. **Construction Phase.** The consultant will be responsible for:

- (i) Preparing a project implementation manual covering the project organization, the payment procedures, and project time schedule and quality insurance program. The consultant will also establish a computerized project monitoring program using appropriate off-the shelf software packages.
- (ii) Preparing the overall disbursement plan, monitor costs and maintain project accounts.
- (iii) Reviewing and approving the engineering design drawings, calculations, delivery program and documents submitted by the contractors.
- (iv) Monitoring the execution of the Project in line with the project time schedules and with the work programs provided by the contractors.
- (v) Advising the EA and seek approval from ADB and/or from other co-financiers for any variation orders to be issued to the contractors.
- (vi) Identifying any problem areas during project implementation, propose remedial actions and promptly report any outstanding issues to the EA.
- (vii) Conducting field visits at regular and appropriate times during construction testing and commissioning. For the transmission line, the consultant will organize for coordination purposes joint review meeting at regular interval (not more than once every quarter).
- (viii) Advising the EA on any contractual or technical disputes that may arise between contractors and the EA during implementation phase.
- (ix) Providing advice and support to the EA for the settlement of the contractor claims.
- (xi) In line with the work programs of the contractors, preparing and advising the EA on the outage planning of existing facilities during implementation. The outage planning will be modified/updated regularly and will have to take into account any unplanned outages resulting from any faults arising in the network. The consultant will give special attention to minimizing as much as possible the impact of the outages in the supply of power. Considerations such as seasonal or weekly constraints will have to be taken into account. The consultant should hold

periodic meetings with the operators of the Central Dispatch Center for this purpose.

- (xii) Coordinating safety measures between live components in operation and components under rehabilitation. Give advice and when required training to DABM and Barki Tajik on safety planning and safety measures.
- (xiii) Witnessing in factory inspections and performance tests within the framework of the contracts.
- (xiv) Reviewing and approving the calculations for protection settings submitted by the contractor.
- (xv) Reviewing and approving the commissioning test reports submitted by the contractors; attend the commissioning phase; establish the list of deficiencies after commissioning and prepare a timeframe for the contractor to remedy the deficiencies. Establish a monitoring program for the use of the EA.
- (xvi) Reviewing and approving the as-built drawings and operation and maintenance manuals
- (xvii) Preparing and issuing the provisional acceptance certificate for the works as well as for the spare parts. Prepare the final taking over certificate along with the final payments to be issued by the EA after the end of the warranty period and the remedy of all deficiencies.

5. **Project Administration.** During project implementation the consultant, in addition to provide on the job training to the EA in the fields of procurement, contract management, technical, environmental and social issues, will:

- (i) Keep records of all correspondences between the EA, the contractors the consultant and the ADB
- (ii) Keep records of any disbursement under the Project. Prepare and update on a regular basis the forecast disbursement schedule.
- (iii) Develop and implement applicable procedures required to ensure adequate control of the manufacturing, factory tests, delivery, and acceptance of the materials and equipment.
- (iv) Periodically update the overall project disbursement schedule and physical target accomplishment.
- (v) Prepare and implement an environment monitoring plan on the basis of the initial impact assessment report.
- (vi) Assist with the implementation and if necessary periodic revisions of the Resettlement plan and ensure that timely reporting on RP implementation is carried out and included in the quarterly report. Assist the EA and the local government with necessary public consultations. Liaise with EA and local government to ensure that all compensations are duly and timely paid and that

the right of way is cleared from a social point of view as well as from security purpose (demining).

- (vii) Undertake project monitoring and evaluation during the project upon completion.
- (viii) Prepare the project completion report.

International Firms in association with domestic consulting firm will provide the consulting services & will be selected and engaged by State Joint Stock Holding Company Barki Tajik in accordance with the [ADB's Guidelines on the Use of Consultants](#) and other arrangements satisfactory to ADB for engaging local consultants.

BT now invites Expression of Interest (EOI) from ADB member countries Consulting Firms and having expertise and adequate experienced professional staff of different disciplines for short-listing of consulting firms. The EOI should demonstrate firm understanding of the requirements of the Project/sub-projects and an understanding of the tasks set forth in the scope of services. In particular, the EOI should consist of:

- i. the background, organization and experience of the firm, including works done and at hand during the last ten years
- ii. detail resume of each of the proposed professional staff to be assigned to carry out the services etc.
- iii. Financial resources
- iv. Annual turnover (at least last five years)
- v. Audit Report (at least last three years),
- vi. Registration with Pakistan Engineering Council if the consultant is short listed.

All EOIs (five copies each) must be submitted to the Mr. Samiev, State Joint Stock Holding Company Barki Tajik, either by mail or in person on or before **15th December 2006 at 2:00 p.m.** local time. BT will not reimburse any cost or expenses incurred in connection with the preparation or delivery of EOI or visits to any office or site.

The limits and extents of services may increase or decrease (and source and mode of payment may vary) depending on the final loan agreement with the development partners.

The competent authority reserves the right to accept or reject one or all EOIs without assigning any reason.

The recruitment process will be finalized only after the project is approved by ADB, Governments of Afghanistan and Tajikistan.

Mr. Samiev  
State Joint Stock Holding Company Barki Tajik  
Republic of Tajikistan