

NOTICE

**THE INTERESTED FIRM MUST FILL THE BELOW INFORMATION
URGENTLY AND EMAIL AT proc.wbprojects@pedo.pk with SUBJECT:
FIRM NAME - ASSIGNMENT TITLE**

1	ASSIGNMENT TITLE	
2	FIRM NAME & ADDRESS	
3	CONTACT PERSON NAME & CONTACT NUMBER	
4	CONTACT PERSON EMAIL ADDRESS	

Terms of Reference

GOVERNMENT OF KHYBERPAKTUKHWA

Pakhtunkhwa Energy Development Organization (PEDO)

**Khyber Pakhtunkhwa Hydropower Development Program
(KPHDP)**

TERMS OF REFERENCE (TOR)

FOR

**MANAGEMENT SUPPORT CONSULTING (MSC)
SERVICES**

NOVEMBER 2019

I. Introduction

1.1 The Government of **Khyber Pakhtunkhwa (GOKP)** has obtained an advance from the credit from the World Bank for the **Khyber Pakhtunkhwa Hydropower Development Program (KPHDP)**. The overall project development objective program is to facilitate the expansion of electricity supply of hydro-power in Khyber Pakhtunkhwa and Pakistan. PEDO is now starting the implementation of the program with assistance from the World Bank. For construction supervision PEDO has already selected the construction supervision consultants who would also be covering the roles of the Project Manager and the “Engineer”, as per FIDIC agreement. This consulting services will be recruited to provide Management support to PEDO in its capacity as the “Client/ Owner” of the hydropower programs and projects, in management, and in monitoring and evaluation of the project progress. This "Terms of Reference" is for this Management Support, mainly in an advisory role. This activity will be financed by the loan from the World Bank for KPHDP.

II. Objectives and Scope of Work

2.1. The primary objective of the services to be provided by the Management Support Consultant (MSC) is to assist PEDO efficiently and effectively manage operations of its various functions, and carrying out duties as the Employer during project implementation.

2.2. In this capacity the MSC is expected to assist PEDO inter alia, in the following management functions: (i) Planning and implementation of an effective hydropower portfolio of hydropower program; (ii) Project management, including PEDO role as employer in the works and equipment contracts, coordination, technical reviews, reporting, monitoring of progress and plans etc., (ii) Budgetary and financial Management, advice in mobilization of financing for PEDO’s programs; (iii) Review of Quality Control and Quality Assurance Plan, (iv) Reviewing payment certificates if required, (v) Contractual advice, variation orders and settlement of disputes, claims (vi) Implementation of the Social Safeguard Plans (environment, resettlement etc.), and (vii) Design and Management of a Monitoring and Evaluation (M&E) Program for socio-economic aspects of hydropower projects of PEDO.

2.3. Provision of assistance to PEDO in organizational development and capacity building in all aspects of PEDO functions, projects management, plant operations & maintenance, financial management, developing financing, legal and institutional strategies; support PEDO in recruitment and management of financial and legal services etc. as required for mobilizing investment.

Detailed Scope of the Services

2.4. The scope of services provided by MSC shall, inter alia, include but not limited to: assist PEDO in efficiently and effectively manage operations of its various functions, and carrying out the duties as employer of the project by way of, but not limited to the, following:

- (i) Scope in effectively planning a portfolio of investments in KP;
- (ii) overall management of the project, progress monitoring and updating overall planning of the project;
- (iii) Monitoring and evaluation of implementation progress of all project works and activities;
- (iv) Supervise the overall monitoring and evaluation of physical, hydrological, environmental, social and economic impacts of the project,
- (v) Create a monitoring and evaluation framework for the for hydropower programs in consultation with PEDO. Track key indicators (input, output and outcome) of implementation schedule. Also the Consultants will develop mechanisms for ensuring that the lessons learnt are accounted for.
- (vi) Develop a user-friendly, interactive, web-based computerized Project Monitoring Information System (PMIS) for operational and under implementation Hydropower projects activities.
- (vii) Budget control mechanism including maintaining detailed records of payments for Contracts as certified by the Engineer and approved by the Employer;
- (viii) setting up and implementing a computer based menu driven financial commercial accounting system for PEDO including cash flow projections for the funding organizations;

- (ix) reviewing of periodic progress reports submitted by the Engineer and preparation of other reports as required by PED/co-financiers and propose project coordination/liaison meetings as needed;
- (x) periodically reviewing the Quality Control and Assurance records, tests and reports, including spot checks, to ensure that the plan is being properly implemented and the discrepancies have been corrected. The MSC shall bring any serious discrepancies to the notice of the PEDO;
- (xi) supervision of the implementation of the environmental action plan, social action plan, including monitoring and management requirements in relation to the land use, the fisheries and wild life, and terrestrial plans and other environmental matters described in the action plans;
- (xii) Supervision of the implementation of the Resettlement Action Plan including any monitoring and management requirements;
- (xiii) design and Management of a Monitoring and Evaluation (M&E) System for socio-economic aspects of projects to set up a base line based on which micro and macro economic impact of the project in local and national economy can be calculated;
- (xiv) work interface management of various consultants and contractors on project;
- (xv) checking bills when PEDO requires to verify any payment certificate.
- (xvi) Support in development of the financing plans for various projects and PEDO's investment programs;
- (xvii) risk management. The MSC will assist PEDO to monitor and evaluate risk management plans prepared by construction design and supervision consultants and the contractors;
- (xviii) assist the PEDO in fulfilling its contractual obligations and final settlement of contracts
- (xix) assist Project Directors in office management, administration and records keeping;
- (xx) Develop strategy and plan to deal with different stakeholders like Government, Co-financiers, News media, Local communities, different government and non government agencies;
- (xxi) Provide concurrent reporting on project status and lessons learned during implementation (including data, analysis, photographs, description, and easy-to-read visuals) to enable better adaptive management.
- (xxii) Post project review.

2.5. The scope of services outlined above are further detailed, but not limited to the items below:

Task 1: Portfolio planning and financing, Review and Monitoring of Project Planning and Coordination, Monitoring of the physical progress, implementation issues and suggestions and solution to resolve those

Portfolio planning and financing.

2.6. Support PEDO in developing and effective and optimal portfolio/program of investments that PEDO should undertake. Prepare a financing plan for such a program considering all possibilities of financing, government, internal cash generation, commercial loans and bonds, private sector projects, private and public sector partnerships (PPP) and other modes of financing suitable for each project and the program. Support PEDO in preparing documentations in mobilizing financing for the PEDO's investment program. Develop plan for making PEDO a modern investing house in the development of hydropower in KP and Pakistan;

2.7. **Select key performance indicators** for measuring and monitoring progress toward the project completion. To ensure the satisfactory and simultaneous execution of the construction contracts as well as a number of smaller contracts, the MSC shall assist PEDO in managing, recording, monitoring or reviewing the following project management, coordination reporting and other activities undertaken by the Engineer and shall carry out the parallel actions as indicated below and specifically designated as the responsibility of the MSC;

2.8. The project is **expected to have a computer based state-of-the-art monitoring system** to monitor key performance indicators, produce useful reports, and track achievements according to plan. These indicators and reporting formats (including easy-to-read graphics) can be further expanded, refined, and organized (e.g. into input/process, output/outcome, or core/ancillary indicators) by the Consultants with the agreement of the PEDO, in the early stages of undertaking this assignment. Before such agreement, the consultants will illustrate such systems being utilized in various developed countries. All aspects of the project – including technical, institutional, environmental, social, economic, financial, and procurement status will be monitored to help indicate actual achievement compared to the plans in the Procurement and Financial Management guidelines and other relevant documents.

2.9. The consultants will provide **support to PEDO in overall project management activities such as preparation of project implementation plans, expenditure planning** budgeting and financing forecast and plans, monthly, quarterly reports and annual reports or work programs as required by the PEDO and financiers of the project. They will also help in development of the procurement plans, contract management, financial

management for which they will develop a system that will be used in association with the Chief Engineer/Project Director responsible for financial management of the project. The plans will be updated on a regular basis as required by client.

2.10. The consultants will also support the client in day to day management issues.

2.11. In connection with preparation of PMIS, the Consultant will develop an integrated, user-friendly web-based software to manage project activities in accordance with the modern concept of project management and track key project indicators, install this on a secure web-server as per approval of Client and ensure that this can be accessed (with password protection and other security measures) in all project implementing entities. The consultants would carry out technical audits, checking the quality of works, cost estimates, payments made, disbursements claimed and procedures followed under the project implementation.

2.12. **Project Planning.** Reviewing at the onset of the project the activities breakdown structure, logical relationship of project activities and milestones, time based network diagram, planning & adequacy of resources allocated for activities, critical activities and their sensitivity in terms of project completion time. Modern software like Primavera or MS Project may be used where Gantt chart, Network Diagram using PERT etc may be utilized to verify the scheduling and planning of project activities and resource allocation prepared by the Engineer and Contractors. In doing so a base line planning in consistence with goals and objectives of the project in respect of time, cost and quality is to be established based on which the project will be monitored during implementation. Network diagram using Gantt chart/PERT, Earned Value Management/S-Curve may be used. Organizational structures of Construction Designs and Supervision (CSC) and Contractors are also to be reviewed in terms of (1) appropriateness of job description, their roles, responsibilities and authorities, responsibility assignment matrix, just-in-time information communication system for planning & control, identification of conflicting situations etc. The project plan shall be prepared in such a way like a road map which can be used as a guide from beginning to the end of the project

2.13. As the projects progresses the cost, time and performance parameters must be managed which will involve continuous re-planning of these yet undone phases in the light of emerging data on what has actually been accomplished.

2.14. The MSC shall advise and assist the PEDO in any activities requiring Government actions or permissions in particular where there these have documentary program implications. MSC shall keep the Engineer fully informed regarding these.

Progress Monitoring and evaluation

2.15. MSC has to keep track of and check systematically all project activities. Assessment of progress status, project trends specially in terms of time and cost. If there is any deviation MSC shall suggest corrective actions which can take the form of re-planning, reprogramming or suggestion regarding reallocating resources or changing the way the project is managed. MSC has to periodically carry out SWOT (strength, weakness, opportunities and threats) analysis of the project and prepare reports as to how gain strength and opportunities and suggest plans to deal with weakness and threats. MSC has to review the internal and external forces/factors that likely have impact on the project and suggest ways and means to properly deal with those. MSC has to take due consideration of the following issues:

- (i) Status of different project activities with respect to schedule, cost, technical performance and objectives
- (ii) Identification of things going right and going wrong including emerging problems and opportunities;
- (iii) Stakeholder's comforter with the project.

(iv) **MSC is to review the followings:**

- whether current project schedule is realistic.
- adequacy of availability of resources
- adequacy of organizational plan of CSC and contractors.
- adequacy and efficacy of information system of the project.
- effectiveness of progress monitoring and reporting.

2.16. Periodically reviewing, by computerized management technique like Primavera/MS Project, project schedule, update bar charts, network diagram using PERT, CPM for each of the contracts to monitor actual with

planned progress. The reporting of these reviews will be included in the periodic progress, reports which will be prepared by the MSC in collaboration with the Engineer of the PEDO to submit to the Government and the Co-financiers. These reports will include explanations on stoppages or delays, measures necessary to avoid any future delays; an indication of measures required to recover any lost time in the implementation of the Project; and any adverse social & environmental impacts that occur during construction, the corrective measures taken to remedy these impacts, and the steps taken to avoid their recurrence. Matters requiring action shall be clearly highlighted in the periodic reports, and conveyed by PEDO to the Engineer promptly for quick action

2.17. MSC has to analyze and give suggestions to PEDO regarding following issues which in many cases are causes of project failures:

- Lack of understanding of the project complexity
- Lack of access and internal communication
- Failure to integrate the key elements
- Inadequate monitoring, evaluation and control
- Subtle change in the requirement
- Ineffective execution strategy
- Contractors/consultants/clients with different expectations
- No share “win-win” situation
- Inadequate training and expertise.
- Lack of leadership commitment.

Project Audits

2.18. Periodic project audits have to be carried out quarterly. It will provide the opportunity to have an independent appraisal of where the project stands and the efficiency and effectiveness with which the project is being managed. During the process following things are to be assessed:

- Determination of what is going right and why
- Determination of what is going wrong and why
- Identifying forces and factors that have prevented or may prevent achievement of cost, schedule, and technical performance goals
- Evaluating efficacy of existing project management system including organization supports, policies, procedures, practices, techniques, guidelines, action plans, funding patterns, and human and nonhuman resource utilization.
- Providing for an exchange of ideas, information, problems, solutions and strategies with the project team members.

Coordination and Interface Management

2.19. MSC will assist PEDO in interface coordination and management between the various contracts and major work within each contract on site in relation to construction planning, interaction and integration of all physical works and interfaces both for permanent and temporary works. There shall be interface planning by contractors and CSC. The MSC is to review and monitor it. The MSC shall assist the PEDO in carrying out its duties in relation to permits, customs arrangements, approvals and relations with other agencies, coordination of commonly used facilities.

Contractual Documentation

2.20. Recording, as checked by the CSC Engineer, all insurance, performance bonds indemnities, ownership of plant, etc. which the contractors are required to submit.

Certificates

2.21. The MSC shall (or support PEDO) process the interim Payment Certificates, Certificates of Completion. Final payment Certificates and Maintenance Certificates in accordance with the conditions of contract.

Budgetary/Financial Control

The MSC shall assist the PEDO to maintain project budgetary/financial control by means of:

- (a) keeping up-to-date records of commitments and disbursements;
- (b) periodic check on quantities of work executed and those still to be executed (including a three monthly review of project expenditure, both local and foreign);
- (c) projections of cash-flow and assessment of optimum requirements for financial contributions by the various financing organizations; and
- (d) setting up a commercial accounting system using menu driven software for PEDO and estimation of toll levies needed during operation.

Establishment of New Rates and Settlement of Claims & Disputes

- (a) The MSC shall formulate recommendations to the PEDO on the rates for any unscheduled items of work which may arise beyond the authority of the Engineer. The MSC shall advise PEDO in contractual matters and give assistance in the settlement of claims/disputes according to the procedure laid down in the various construction contracts. The MSC will also provide contractual advices to the PEDO.
- (b) The MSC shall arrange for meetings as necessary of the Disputes Review Board and transmittal of the findings to the PEDO.
- (c) The MSC shall arrange project meetings desired by PEDO and carry out all preparatory works and preparation of minutes of meetings.

Implementation of Social Safeguards.

2.22. PEDO have prepared Social and Environmental assessments and social and environmental management plans. The MSC and M&E shall assist the PEDO and relevant agencies in monitoring, coordinating and implementation of above plans, supervising the measures necessary to mitigate the projects effects on the society and environment as outlined in the plans. The assistance will include review of social and environmental plans & guidelines and, where necessary, structuring and phasing implementation of the plans and identifying the specific agencies [governmental and non-governmental (NGO)] to be involved in the mitigation of social and environmental protection activities, particularly in cases where NGO participation needs to be arranged and coordinated

2.23. The MSC shall assist the PEDO in monitoring and supervision of the implementation of the Resettlement Action plan and social management plan Assist PEDO in implementing any additional resettlement requirements that may emerge during project implementation.

Task 2: Monitoring and Evaluation of Socio-Economic Impact:

2.24. MSC will be required to design a long-term M&E program, which will require endorsement of the key financiers. MSC will propose implementation arrangements for this program using qualified local institution. The MSC has to establish the baseline data. The impact study will, inter alia, include but not limited to:

- **Impact Assessments** – “Assess how the hydropower could contribute to growth and poverty reduction, specifically identifying, assessing and, as far as possible, quantifying its social and socioeconomic impacts in local, regional and national level.
- **Structural Constraints and Complementary Actions** – “Identify structural constraints that limited the benefits of the PEDO Projects to the poor and recommend complementary actions to overcome these constraints.”

National Impacts:

The main impacts study will include:

- The development of the national economy;

- Industrial development; and
- North Part of Pakistan and the project area, in particular the Kohistan District

Regional Impacts will include:

- Economic development;
- Commodity Prices;
- Transportation and linkage with the rest of the country
- Agricultural production; industrial production, manufacturing etc,
- Sector and factor level; and
- Investment.

Local Impacts will include:

It will include bridge impact area, ferry impact areas and the project affected persons

- employment opportunities, wages, and incomes;
- Landholdings, land availability and land valuations;
- opportunity costs for unrealized development plans and under-utilization of Project-created assets if any;
- socio-economic condition of resettled population as a result of the project;
- Quality of life indices in the local impact area;
- impacts regarding access to potable water and sanitary waste disposal facilities;
- environmental health and safety risks;
- local services, education, health and other; and,
- The impact on gender issues.

Monitoring and Evaluation of Project Impact

2.25. In this context, the consultants will carry out, but not limited to the following activities:

- i. Provide technical assistance to PEDO and their staff in the HQ and field offices for achievement of project completion objective.
- ii. Develop the overall framework of monitoring and evaluation plan including collecting, analyzing, and reporting project data for continual effective tracking of project implementation activities.
- iii. Formulate a set of key performance indicators and means of assessment against these indicators for project activities to be implemented.
- iv. Monitor and evaluate the implementation of project activities with respect to schedule, cost, technical performance, objectives and social & environmental impacts.
- v. Propose recommendations about project modalities to ensure achievement of envisaged objectives of power development.
- vi. Oversee and execute M&E activities of implementation Schedule and techniques with particular focus on results and impacts as well as in lesson learning.
- vii. Develop formats (including documentation, surveys, data analysis, photographs, and interviews) for the Completion Report;
- viii. Estimate project benefits, economic and financial rate of return and also prepare project completion report; and
- ix. Any other duty assigned by the project management.

2.26. **Evaluation of Project Performance.** In addition to regular monitoring, impact assessments for PEDO in the form of Completion Report and for the overall project (at two key junctures during project period and performance benchmarking at all times) shall be undertaken to evaluate the project's performance and progress towards achieving the set objectives and provide advice to PEDO or mid-course corrections. The mid-term evaluation report would be completed a month before mid-term review and the final impact assessment will be undertaken prior to project completion.

2.27. As a part of project evaluation, the consultant shall undertake overall project evaluation (based on key output and outcome indicators) of the monitored information would require analysis of the monitored information, and special analyses at mid-term and final stages (e.g. use of remote sensing to determine diversification), with a focus on determining achievements and documenting lessons learned.

Task 3: Independent Supervision of EMP and SAP

2.28. **In** this the consultants would carry out, but not limited to the following, activities: carry out independent supervision of implementation of Environmental and Social Management framework, already prepared by the design consultants. In this regard, the consultants will devise key performance indicators, produce useful reports, and track achievements according to plan. The indicators and reporting formats (including easy-to-read graphics) can be further expanded, refined, and organized (e.g. into input/process, output/outcome, or core/ancillary indicators) by the Consultant with the agreement of the Client. All aspects of the EMP and SDAP – including technical, institutional, and procurement status will be monitored to help indicate actual achievement compared to the plans in the PAD. Procurement and Financial Management guidelines and other relevant documents. The consultants will enter into contracts appropriate institutions such as Wildlife Department and WWF or other such entities etc. for monitoring of flora and fauna around the barrage in the construction area and in particular the aquatic resources, fisheries and purpose measures to minimize and eliminate impact on of construction works to be carried out on the hydro programs;

Task 4: Project Management Support and Optimization of Project Implementation

2.29. **Project Management Support:** The consultants will provide support to PEDO in overall monitoring and evaluation of project impacts as well as database management, strategic studies, demonstration of new technologies and similar other assignments. The plans/strategies will be updated on a regular basis as required by the Client.

2.30. **Reporting:** The Consultants will produce the reports (described in the Deliverables and Schedule in formats agreed with the PEDO during Implementation. The Consultants are expected to make regular presentations on project performance at multiple levels. In addition, the Consultants will develop special publications and videos on project activities, success stories, and other lessons learned. All reporting and presentations should be made in an easy-to-understand manner, using graphics, spatial representation of data, sc

2.31. The MSC shall advise the PEDO on possible ways to reduce the expenditure, on possible measures for improving efficiency and reducing the total project costs.

2.32. **Record.** The MSC shall maintain and review the daily records held by the PEDO as produced by the contractor through the Engineer, on work progress, labor, equipment, major construction materials at site, work accomplished, weather, river condition, accident, as well as any other events affecting project cost or implementation schedule.

2.33. **Project Meetings.** The MSC shall assist the PEDO during participation at periodic project meetings among the various contractors and the Engineer. The meetings will be held to discuss, inter alia, progress, coordination, problems encountered and payments relating to the project. The MSC shall assist the PEDO in the preparation and coordination of periodic project meetings involving the Co-financiers, the PEDO, the Panel of Experts, the Engineer and the MSC shall prepare the minutes of meetings.

2.34. **Coordination on Start of Operation of Project.** The MSC shall assist the PEDO in the orderly taking over of (parts of) the sites or the works, as certified by the Engineer, resulting in a timely and smooth start of the operation or parts of the Operation.

2.35. **Operation and Maintenance.** The MSC shall assist the PEDO towards the management and coordination of taking over and successfully starting the Operation and Maintenance of the project by way of extending the financial commercial accounting system for the Operation and Maintenance of the project after competition. The MSC shall set down the job descriptions for the PEDO staff to be involved in these activities- and shall integrate these with the job descriptions set down by the Engineer for other PEDO staff. This integration shall include the formulation of the administrative structure necessary to ensure a coherent whole for the ongoing operation and maintenance of the bridge project..

III. Implementation Arrangements

3.1 **The Executing Agency:** The PEDO is the implementing agency for hydropower program MSC will also report to the Chief Executive of PEDO. The PEDO will be responsible for providing the existing data and information including all reports prepared to date for the project.

3.2 **Consultant Selection Criteria:** The consultants would be selected following the Quality Based Selection (QBS) criteria under the World Bank Guidelines for selection of consultants and the form of contract would be Complex Time Based Contract.

3.3 **Contract Schedule:** The start of MSC contract will be synchronized with the start of the main construction contracts and the start of CSC. Currently, it is envisaged that the MSC would be mobilizing around March 2020. The duration of the MSC contract will initially be for 6 years, which will be adjusted to coincide with the actual physical completion of the projects.

Staffing Requirements

3.4 The consultants are encouraged to maximize the use of expertise available in Pakistan satisfying the qualification requirements as mentioned in this TOR. However, international experience and experience with the projects of international agencies are necessary to carry out the assignment. The consultants are allowed to propose a staffing plan and skill mix necessary to meet the objectives and scope of the services. If all required skills are not available within the consulting firms, they are encouraged to associate with other firms.

3.5 The MSC shall provide a detailed list of proposed staffing and corresponding person-month inputs. The staffing proposal should clearly indicate the international and national staff inputs.

Panel of Experts (PoEs)

3.6 A Panel of Experts been established by PEDO to review/ comment on the design and procurement aspects of the project. The panel is expected to be retained during the implementation phase of the project as well; the MSC will be required to provide full support to the work of the PoEs.

Confidentiality

3.7 All reports, documents, correspondence, drawings, notes, specifications, data, work product in any form and, technical data compiled or prepared by the MSC and communicated to the Client in performing the services (in electronic form or otherwise and including computer-disks comprising data) shall be the sole and exclusive property of the Client, and may be made available to the general public only at its sole discretion. Senior members of the MSC team shall be required to sign a Confidentiality Agreement to the above effect.

Reporting Requirements/ Deliverables

3.8 **Inception Report:** An Inception Report within two months of start of the assignment, outlining overall work program of the MSC which shall include but not limited to (1) Management Supervision Methodology Manual; (2) Detailed work Plan; (3) Consultant Organogram and staffing with job description, authority and responsibility (4) Quality Assurance and Quality Control Procedure Plan and Manual; (5) Sample output for monthly and quarterly report.

3.9 **Daily Reports/Diaries:** The Team leader and his team shall maintain a daily diary where required indicating all major activities & progress, men and machinery deployed by the Contractors and actual inspections, checks and approvals accorded. A daily one-page report shall be sent by e-mail or fax to the Project Director and to his site Representatives. MSC is also required to check, compile such report prepared by the CSC and sent to the Project Director with suggestions.

3.10 **Monthly Progress Report:** By the seventh (7) day of each month, the Consultant shall submit sufficient copies of Monthly Progress Report in the accepted form briefly and concisely, describing

all activities and progress for the previous month using bar charts, S-curve etc. problems encountered, or problems anticipated shall be clearly stated, together with steps taken or recommendations for their correction. This shall also record the payment status of the contract, status of all claims for costs or time extensions submitted by the contractor. The report shall include the minutes of the monthly site coordination meetings and copies of relevant correspondences. It will also indicate the work to be performed during the coming month, progress on EMP, SAP and RAP and the dates of induction and de-induction of various key personnel etc. MSC is also required to review, analyze, give comments & suggestions on such reports prepared by the CSC

3.11 Quarterly Progress Report/Project Audit Report: The MSC shall prepare a comprehensive report summarizing all activities at the end of each quarter, to be submitted to the Employer by 15th of the following month. Such reports shall essentially be monthly progress reports with summary of the Quarter in respect of (i) the activities of the Engineer, (ii) the progress of the contract, (iii) all contract variations, (iv) the status of Contractor's claims, if any, (v) details and brief descriptions of any technical and contractual problems being encountered, and the Engineer's suggestions on how to overcome those, (vi) details of physical and financial progress in approved formats, including financial details of the contracts as a whole consisting of the costs incurred, the forecast cost and the financial plan (by PEDO) (vii) conditions which would significantly affect construction schedules or the cost of the project (viii) progress on EMP, SAP and RAP; (ix) any other relevant information for the ongoing contract. The quarterly report due after one year shall also be prepared on similar lines with summary of the whole year. The reports shall also be submitted in electronic format in addition to the required nos. of hard copies. MSC is also required to review, analyze, give comments & suggestions on such reports prepared by the CSC.

3.12 Annual Summary Report: The Annual Summary Reports, which are required for the PEDO to report to the Government of Pakistan (GoP) and to financing organization shall present the kind of information required for such reports and which will be more financial than technical. MSC is also required to review, analyze, give comments & suggestions on such reports prepared by the CSC.

3.13 Supervision Manual: The Consultant shall prepare a detailed Management Support Consultancy manual by end of 2nd month of its Services. It would be appropriate to update/improve the Manual every 6 months or at suitable intervals, taking into account the experience during the intervening period. The Manual shall define the principles of supervision and roles and responsibilities for various categories and levels of supervisory staff. The Manual should encompass every aspect of construction supervision including project management, quality control and contract administration. A soft copy shall also be submitted to PEDO website.

3.14 Quality Assurance Manual: The Consultant shall prepare a detailed Quality Assurance Manual by the end of 2nd month of its Services, indicating the tests to be performed for quality assurance as per the Standards, along with the person responsible to accept the same. The consultant shall send a copy of the approved version of the Quality Assurance Manual to all the employer's representative in the project down to Assistant Engineers level on its own arrangement. Additional 10 copies shall be submitted for sending to other wings of PEDO by the Employer. A soft copy of special tests, if any, shall also be submitted to MIS unit for its availability in PEDO website. The MSC is also required to review such manual prepared by the CSC.

3.15 Engineering Reports: The MSC shall prepare specific reports required in the event of particular unforeseen circumstances. Such reports shall be prepared as requested by the Employer and shall include an analysis of the engineering matter in question and shall propose possible solutions thereto.

3.16 Contract Completion Reports/Post Review: The MSC shall prepare a comprehensive completion report for the Works Contract. These reports shall be submitted immediately after completion of the Works by the Contractors. The reports shall summarize inter-alia the method of construction, the construction supervision performed, problems encountered, solutions undertaken, lessons learned and recommendations for future projects of a similar nature. A draft of teach

Completion Report will be prepared first (six copies of the draft to be submitted to the Employer), which will be finalized after obtaining comments from the Employer. Each of these Completion Reports will be updated by the Construction Supervision Consultant (CSC) and subsequently by Management Support Consultant incorporating the relevant information and comments of the Employer.

3.17 The MSC will submit format/ outlines of the above report (as part of the Inception Report) to the Client for prior approval. The other *deliverables* to be provided by the CSC, some of which have already been mentioned, are listed below:

- Final reports summarizing the key information from the contract completion report and incorporating other relevant issues.
- Comprehensive responses to all site queries and requests for information from contactors and others;
- Risk management plan
- Reports/reviews undertaken of contactor's submissions;
- Records of inspections undertaken by the supervision staff;
- Records of tests undertaken;
- Photographic (video & still) record of the works under construction taken by contractors;
- Comprehensive as built records including as built Drawings;
- All documentation and records produced by the Engineer under contracts;
- Monthly valuations and certificates;
- Final valuations and certificates;
- Records of monthly and final measurement used to assess monies due to Contractors under the contracts;
- Records of assessment of claims and variations;
- Snagging list;
- Details of remedial works undertaken;
- Handover Inspection reports;
- O&M tender documents;
- O&M tender assessment report;
- O & M Manual.
- Preparation of notes and reports by the consultants on subjects requested by the Government.
- Provision of comments as required by Co financiers and / or the Government on various topics related to the Services.

3.18 During the course of the project the CSC shall prepare and submit additional deliverables as required by the PEDO in order to demonstrate that the Project Objectives are being met and that the MSC is fulfilling the scope of works and this ToR. Deliverables will follow a format to be agreed with the PEDO and Co-financiers and where required shall carry the identity of the same parties.

3.19 **Key Professional Staff.** The consultants are free to propose a staffing plan required to deliver the services, however, following is the indicative key staff that may be required for the assignment:

1. Team Leader
2. Deputy Team Leader
3. Project Monitoring and evaluation advisor
4. Procurement and Contract management advisor
5. Financial management Advisor
6. Project and Corporate Financing Expert
7. Environmental Management Advisor
8. Social and resettlement advisor
9. Community Development specialist
10. Legal Advisor
11. Public Relations Advisor
12. Record and documentation Advisor

13. Economic Advisor