**TERMS OF REFERENCE**

**FOR CONSULTING SERVICES OF TECHNICAL SUPERVISION OF DESIGN AND CONSTRUCTION OF A NEW 400 KV VULCANESTI–CHISINAU SINGLE-CIRCUIT OVERHEAD TRANSMISSION LINE AND EXTENSION AND UPGRADE**

**OF 2 SUBSTATIONS**

# PROJECT BACKGROUND

ThePower System Development Project (PSDP, “the Project”) is supporting the GoM’s overall asynchronous interconnection program. Once established, the asynchronous interconnection will substantially enhance security of supply by diversifying the supply mix and creating conditions for market competition in Moldova. Enabling the interconnection requires commissioning of two mutually complementary infrastructure components: construction of the BtB station and the domestic transmission network reinforcement containing a new 400 kV Vulcanesti-Chisinau transmission line and extension of two existing associate substations.

The PSDP will support investments aimed at the construction of the 400 kV Vulcanesti-Chisinau overhead transmission line, extension of two existing substations, strengthening power dispatch and metering system of the State Enterprise Moldelectrica (“the Beneficiary”).

In 2015, EBRD hired an independent consultant to prepare the Feasibility Study (FS), Environmental and Social Impact Assessment (ESIA), the Environmental and Social Management and Monitoring Plan (ESMMP) and a Land Acquisition and Compensation Framework (LACF). Since the financial arrangements among donors for the entire Project was agreed only in 2017, the developed ESIA and other safeguards instruments, as well as the FS, cover all components of the asynchronous interconnection program that correspond to the requirements of both the EBRD/EIB/EU financed Project and the World Bank one.

The Social and Environmental safeguard documents necessary for PSDP implementation activities have been developed within PSDP preparation ECAPDEV Grant No. TF0A6821 implemented in the period November 20, 2018 – March 20, 2020. The safeguard documents include: Safeguards Summary Note on Environmental and Social Impact Assessment (ESIA); Environmental and Social Management Plan (ESMP) for Moldelectrica new HQ building; Resettlement Policy Framework (RPF).

The objective of the Project is to increase capacity and improve reliability of the power transmission system in the Republic of Moldova.

Moldova Energy Projects Implementation Unit (MEPIU) under the Ministry of Economy and Infrastructure is the entity responsible for the implementation of the Project.

In order to achieve the Project objectives Moldova Energy Projects Implementation Unit (“the Employer” or “the Client”) will engage a suitably qualified Construction Supervision Consultant (“the Project Manager” or “the Consultant”) to provide Contract Administration, Consulting and Supervision services for the construction of a new 400 kV Vulcanesti–Chisinau Single-Circuit Overhead Transmission Line, Upgrade of 330 kV Chisinau Substation and extension of 400 kV Vulcanesti Substation (all Design Supply and Installation types of contracts).

The Services to be provided by the Consultant will be divided in two (2) Stages that will last about **47 months**. The first Stage (I) will include 1 month for pre-Commencement activities, 34 months of works supervision, Completion and Operational Acceptance Certificates issue and other closing activities and will be contracted on a time-basis, while the second Stage (II) will cover the supervision and monitoring during 12 months of Defect Liability Period (immediately after operational acceptance of the works) and will be contracted on a basis of lump sum remuneration. This will be subject to the successful performance of the Consultant in Stage I. This shall include, but not be limited to (a) establishment of systems for contract administration and site supervision for the Design, Supply and Installation Contracts; (b) the administration of Contracts; (c) control quantities and Contract/s costs; (d) monitoring and reporting the progress of the activities and maintaining technical records; (e) verification and certification of Contractor/s’ interim and final payment certificates; (f) the acceptance and/or approval of Contractor/s’ key staff, insurances, guarantees, licenses, programs, method statements, traffic management plans, safety measures, suppliers and materials for incorporation in the activities, the quality assurance and control plans, laboratory provisions and execution of the testing program, subcontractors, equipment and environmental protection; (g) direct supervision of the activities and monitoring of progress including weekly analysis of the facilities installed against the approved plan and reporting outcomes to the Employer; (h) preparation of progress, technical and contractual reports; (i) monitor execution of the control tests of all materials; (j) holding bi-weekly progress meeting with the Contractor/s, recording and submitting signed copies of minutes to the Employer.

The Consultant shall prepare technical and financial proposals both for Stage I and Stage II and will be evaluated for the aggregate price.

The Project completion is intended for August 31, 2024.

# PROJECT ORGANISATION AND MANAGEMENT

The Project will be managed on a day-to-day basis by the MEPIU/Client on behalf of SE Moldelectrica (the Beneficiary). To support the Client in all aspects of Design, Supply and Installation contracts implementation, including administration and supervision of the contracts’ implementation, the MEPIU intends to select a firm or consortium of firms (the “Consultant”) to provide supervision (contracts management) services to the Client.

# OBJECTIVES

The overall objective of the assignment is to act as the Supervision Consultant (“the Consultant”) for the contracts that are part of the scope of this assignment.

In doing so, the Consultant will have the role and attributions as defined in these ToR. In addition, the Consultant will assist the Client with all aspects concerning contracts administration, review all costs and contractors’ invoices, and environmental and social (ES) requirements specific to the Supervision Contracts.

With the involvement of the Consultant, the Client will have access to the best practice in the implementation of the Project administration of Design, Supply and Installation Contracts, as well as advice on specific technical issues including ES requirements.

The main objective of the assignment for the Consultant is to assist the Employer in the administration and supervision of the Design, Supply and Installation Contracts on the construction of a new 400 kV Vulcanesti-Chisinau overhead transmission line, Upgrade of 330 kV Chisinau Substation and extension of 400 kV Vulcanesti Substation with due diligence, to carry out the duties assigned to him in the Contract and provide other services as described in these ToR.

# SCOPE OF SERVICES

The Consultant shall perform the following main tasks:

1. Overall contract management support as required. The Consultant shall perform the duties and authority of the Consultant as specified in or necessarily implied from the Contracts as well as administer the Contracts, dealing with situations in accordance with the Contracts, taking due regard of all relevant circumstances. The Consultant shall perform his duties and act proactively, where the initiative lies with the Consultant in administering the Contracts and in addition providing all necessary warning and reminders to the Contractors and the Employer to ensure timely and smooth implementation of the project and to prevent claims by the Contractor/s in response to the Contractor/s’ or the Employer’s requests; and in observing the requirements of the Contracts.

The Consultant shall perform the Services in accordance with applicable laws of the Republic of Moldova and World Bank’s safeguards standards.

1. Administration of Design, Supply and Installation Contracts implementation; and,
2. Inspect equipment deliveries to ensure compliance with specification;
3. Review all costs and contractors’ invoices and make recommendations on payment to the MEPIU based on contracts and progress of works;
4. Liaise with communities and businesses affected by any of the Works undertaken under the Project;
5. Assist the Client with the creation of an operation and maintenance plan;
6. Assistance to the Client in Project performance monitoring to evaluate effectiveness of the project and measure project performance against the parameters as set out in the Project Operations Manual (POM); to establish baseline data and benchmarks, collect necessary information, monitor progress, identify benefits and evaluate social impact;
7. Assistance in supervision of the Site Specific ESIA/ESMP implementation taking into consideration the World Bank’s safeguards policies and applicable legislation of the Republic of Moldova in Environment and Social field. The Consultant shall exercise all reasonable care to protect the interests of the Client, where this does not conflict with the duties of the Consultant as defined in the Design, Supply and Installation Contract, to ensure the timely supervision and control of the Design, Supply and Installation and to ensure that the activities are constructed in accordance with the Design, Supply and Installation Contracts in orderly manner, by respecting all relevant Environmental, Health and Safety and Social safeguards including GBV requirements.
   1. **Introduction**

The Consultant shall support the Client with the following tasks:

* Administration of the Contracts;
* Direct supervision of the activities and monitoring of progress;
* Preparation of mandatory reporting;
* Provide contracts management support to the Client as required, including contracts supervision of the Site Specific ESMP implementation;
* Ensure that the Client will arrange payments to the Contractor/s, to whom payment has been certified, to ensure that all such payments are made in due time, and that appropriate control and record systems are in place to ensure compliance with financiers and the country reporting requirements;
* Prepare an integrated time schedule for progress meetings with the various parties; attend meetings together with the Client to support the investment programme as a whole, seek response to reports, and discuss contract issues on a regular basis with the Client and other stakeholders; prepare and circulate minutes of the meetings, including follow-up actions required to ensure progress.

The Consultant shall submit its Code of Conduct that will apply to the Experts, to ensure compliance with the Consultant’s Environmental and Social (ES) obligations under the Contract.

* 1. **Supervision of the Design, Supply and Installation Contracts and monitoring of progress**

1. *Commencement of Activities on Site*

The Consultant will have the following obligations:

Within two weeks from the effective date the Consultant shall organise a meeting with the Employer’s/Beneficiary’s and Contractors’ representatives and make a presentation regarding the main Contracts provisions highlighting key responsibilities of all Parties and of the Consultant (not only technical but also contract administration matters shall be properly covered so that they are understood by all involved), establishing *modus operandi* and communication system and clarify the expectations regarding Contract’s execution including early warning systems in case any issues arise. The focus shall be made on collaboration between the parties and amicable settlement of issues.

Before the start of the Activities, the Consultant shall address, inter alia:

* 1. Advise the Employer in approving Contractor's insurance policies and guarantees;
  2. Approve, when satisfactory, the Contractor's Quality Assurance Plan;
  3. Facilitate any communication and attend any meeting between Contractor/s and the owners of other facilities (water, telephone, electricity, gas), roads and railways administrators/owners sharing the road right-of-way; in particular, give advice on proposed modifications by the owners of facilities;
  4. Ensure that Environmental, Health and Safety and Social provisions set out in the contract documents are respected;
  5. Ensure that traffic operational safety is met before commencing the activities and issue any work plan or drawing in that respect;
  6. Check correctness of co-ordinates and levels of all survey reference markers and require the contractor to make an independent check;
  7. Approve the sources of materials according to the contract/s;
  8. Check the Contractors’ setting out and levels of the designed facilities;
  9. Verify estimated quantities in the Price Schedules (PS) and promptly advise the Employer of any prospective Time and Cost effects and make appropriate recommendations;
  10. Stamp, sign and issue the Verified Construction Drawings to the Contractor as 'Approved for Construction'.
  11. Upon commencement of the activities, in accordance with the terms of the contracts, execute and deliver Commencement Certificates and obtain the countersignatures of the Contractor/s.
  12. If the Contractor/s do not receive possession of the site/s from time to time in accordance with the contract/s, or if a Contractor does not receive a Commencement Certificate within any period stipulated in the contract, assess whether the Contractor is likely to suffer delay and/or incur extra cost and notify the Client accordingly.

1. *Review and Monitor implementation of Environmental and Social Safeguards, Health & Safety provisions*

The Consultant’s responsibility will monitor the implementation of the environmental and social mitigation measures during construction works and after the works are completed in order to ascertain that the mitigation measures are implemented in full compliance with the Site Specific ESIA/ESMP requirements and Specifications.

The Contractor shall develop its Contractor’s Environmental and Social Management Plan (“CESMP”) according to the Site Specific ESIA/ESMP focusing on following components:

* Health and safety Plan,
* Emergency Preparedness and Control Plan;
* Traffic Management Plan;
* Land clearing, erosion control and site restoration / remediation Plan;
* Archaeologic and Find Chances Procedure;
* Air Quality Plan;
* Noise and vibration Plan;
* Wastes Management Plan;
* Site Organization Plan and Procedure;
* Code of Conduct;
* Biodiversity Protection Plan and program for birds monitoring, and
* Other plans.

Prior to the commencement of construction works, the Consultant shall approve the CESMP developed by the Contractor.

The Consultant will ensure that all applicable environmental and social safeguards requirements of the Bank are being adhered to by the Contractor/s prior to construction works commencement. This includes:

* Review and approve the Environment and Social Management Plans developed by Contractor, including all updates at frequencies specified in the respective contract/s and Moldovan legislation;
* Review and approve Contractor’s documents related to Social aspects and all other applicable norms including the Occupational Health and Safety, sexual exploitation and abuse (SEA) and gender-based violence (GBV), Community Health and Safety, Labor Management Plan (LMP) and other documents as per requirements of bidding document;
* Review and consider the ES risks and impacts of any design change proposals and advise if there are implications for compliance with the applicable environment and social laws of the Republic of Moldova and the World Bank, Resettlement Action Plans (RAP), the Environmental Permit and other relevant Project documents/requirements;
* Undertake audits, supervisions and/or inspections of any construction sites where the Contractor/s is undertaking activities under the respective contract, to verify the Contractor’s compliance with the Site Specific ESMP requirements (including compliance with the applicable laws of the Republic of Moldova and other obligations);
* Undertake audits and inspections of Contractors’ accident and grievances logs, community liaison records, monitoring findings and other ES and H&S related documentation, as necessary, to confirm the Contractor’s compliance with ES/H&S requirements and Code of Conduct;
* Ensure, all potential project affected persons, including communities living within the boundaries and surrounding areas of the OHTL are properly informed and provided with information of the project activities, environment and social impacts, and contact information including GRM prior to any physical interventions and implementation of the construction activities;
* Undertake audits and work inspections carried out by the State Authorities in accordance with the Applicable Law and report result of audits and inspections to the Client;
* Require the Contractor/s to prepare and implement Contractor’s Health and Safety Plan and where necessary, require the Contractor to provide and maintain at their own cost all site organisation, accommodation for personnel, office, parking areas for vehicles, toilets, firefighting equipment and first aid kits, traffic signs, environmental and HS signs, provide security for the protection of the facilities or for the safety and convenience of the public or others by complying with applicable ES laws of Republic of Moldova.
* Determine remedial action(s) and their timeframe for implementation in the event of a noncompliance with the Contractor’s ES obligations;
* Ensure appropriate representation of the Employer at relevant meetings with stakeholders and other interested parties including site meetings, meetings with local communities and progress meetings to discuss and agree appropriate actions to ensure compliance with ES obligations;
* Ensure that the Contractor’s actual reporting (content and timeliness) is in accordance with the Contractor/s contractual obligations;
* Ensure relevant government’s policy commitments to gender equality are addressed in the Contract/s;
* Review and approve, in a timely manner, the Contractor/s’ ES documentation (including regular reports and incident reports) regarding the accuracy and efficacy of the ES documentation;
* Undertake liaison, from time to time and as necessary, with Project stakeholders to identify and discuss any actual or potential ES issues/risks and permits;
* Assist the local Social Impact Monitoring Committees (SIMCs) in their activities (for example, arranging Site visits upon necessity, primary/on-spot examination of grievances, their recording etc.).
* The Consultant will ensure that all applicable COVID-19 impact considerations, based on the Bank’s support guidance notes available at [https://www.IBRD.com/sustainability-covid.html](https://www.ebrd.com/sustainability-covid.html). are being adhered to and that the Client/Employer is duly informed about Contractor’s compliance with the requirements.

The Consultant shall monitor and ensure that during the implementation of the Project, all employees, including the Consultant and the Contractor/s’ personnel engaged in the activities related to the implementation of the Project, must fully respect prescribed measures for occupational protection and also additional measures related to COVID-19 pandemic, all in accordance with the recommendations of the World Health Organisation and relevant authorities of the Republic of Moldova.

1. *Design Review, Installation and Plant Supervision and Quality Control*

* Draw up and maintain a schedule of all necessary statutory licences, permits and approvals necessary for the performance of the activities (the Schedule should identify the dates for submissions and approvals, and the person or persons responsible for making application for such licences, permits and approvals either on their own account or on behalf of the Client or the contractor(s)). Check that such applications are made on time and assist in negotiations with other parties, as necessary from time to time;
* Coordinate with and assist the Client to ensure that all permits required are obtained on time;
* Monitor validity of Contractor/s' insurance policies and guarantees and timely advise the Employer on their expiry dates, necessity to request the extensions of the validity and where necessary change the amount of the insurance policies and guarantees;
* Provision and administration of the Project Management Information System (PMIS) for management of project correspondence and documents in accordance with the approved PMIS plan and procedures, and timely updates of the records and reports thereof:
  1. approval of Contractor/s' site installation and ensure that the Contractor complies with all applicable legal requirements regarding site organisation;
  2. approval of Contractor/’s equipment;
  3. approval of Contractor/s' proposal for traffic management and safety at work on sites;
  4. approval of the procedures to ensure compliance with the Site Specific Environmental and Social Management Plan;
  5. approval of the Health and Safety procedures;
  6. certification of measured quantities in accordance with the Design, Supply and Installation Contracts;
  7. approval of earthmoving scheme for earthworks;
  8. approval of procedures for construction of drainage works (if needed);
  9. approval of setting-out of the facilities;
  10. approval of the Contractor/s’ documents and information management system;
  11. comparison of activities output actually carried out with that presented in the tender and discuss with the Contractor remedy to possible slippage;
  12. inspect the facilities installation to check whether performance complies with specifications and drawings;
  13. witness and approve regular tests of materials and of facilities installed, and order additional tests if required;
  14. order the removal of improper or substandard designed or installed facilities;
  15. control materials incorporated into the facilities.
* Review Design documentation, including drawings submittals of the Contractor/s and recommend for its optimization. Check adequacy of the Contractor/s’ detailed design based upon own calculations and evaluations;
* Provide supervision over compliance by the Contractor/s with the requirements of organizational and technological documents that determine the technological process of construction and installation;
* Ensure, through the review, official revision and approval of main and detailed design, the compliance of project documentation with the Employer’s requirements, standards and local legislation;
* Supervise the Design, Supply and Installation, assure technical assistance during design and facilities installation, approve the materials, equipment and workmanship;
* Ensure supervision of Design, Supply and Installation compliance with the requirements of the technical specifications;
* Supervise the Contractor/s’ individual tests of the equipment before and after installation, of facilities to be covered or put out of view and proper registration of their results;
* Carry out oversight inspection of the facilities being installed by the Contractor/s to provide assurance of the quality and standards of the materials and workmanship, and compliance with the specifications and drawings as included in the Contracts, the Approved Design, the Detailed Drawings, the Method Statements, the Quality Assurance Manual and any agreed amendment thereto;
* Participate in the acceptance of equipment during the tests and inspections;
* Daily record site events including facilities installation locations, activities and staffing on site, and quantities to pay (subject to quality tests) in a work site logbook;
* The Consultant and all supervisory / technical staff shall maintain a daily work diary recording site conditions, Contractor’s activities and incidents / events that may occur;
* Day-to-day measurement, verification and recording of quantities of works carried out by Contractor/s;
* Recapitulation of activities carried out monthly;
* Monthly comparison of actual progress against progress as scheduled;
* Review of Contractor/s’ Monthly Statements and Statement at Completion and verify and approve Interim Payment Certificates;
* Attendance at periodic site meetings and monthly progress meetings and ensuring minutes signed by all parties are recorded. Keep full and proper records of all meetings and discussions attended or conducted by the Consultant and make the records available for inspection by the Employer/Beneficiary and the Bank forthwith on request;
* Notify the Employer/Beneficiary and the Bank immediately if a/the Contractor/s fails to complete any section within the applicable Time for Completion or appears likely so to fail. If necessary, prepare a case for the application of liquidating damages for delays or a claim against the Performance Guarantee where a Contractor has failed to perform;
* Suspend the activities (with the obligatory subsequent written notification from the Employer/Beneficiary and the Contractor/s) in cases of threat of deformation and collapse of structures, danger to life and health of people and the environment, as well as failure to comply with technical supervision instructions for the elimination of defects and violations;
* Financial management of the Design, Supply and Installation Contract. Based on (i) Contractor's programme of activities and cash-flow predictions which should be revised at required time intervals and, (ii) upon his own judgement, the Consultant shall prepare, as part of its Monthly Reports, monthly disbursement tables showing the status of previous disbursements and a tentative prediction of future disbursements on a monthly basis;
* For the purpose of confirmation of the Contractor’s applications for VAT with the right of deduction, in accordance to Article 104 (c1) of the Fiscal Code of the Republic of Moldova, and exemption from payment of Customs, Import Duties and taxes for goods that, in the process of use, cause environmental pollution, in accordance with Government Decision No. 246 of April 8, 2010 (including further modifications/additions), the Consultant shall confirm to the Employer that the Plant and Equipment imported for use under the contracts signed between the Contractor and different suppliers, are intended for the implementation of this Contract;
* Attend to the inspections carried out on sites by the state authorities in accordance with the applicable law;
* Organise provisional technical acceptance of facilities and submit all supervision documents to the taking-over committee according to the applicable law;
* Issue the Operational Acceptance Certificate/s in accordance with the Conditions of the Design, Supply and Installation Contract/s noting that no outstanding equipment or installations shall be left for Defect Liability Period (DLP) and the Consultant shall take this into account before issuing the Operational Acceptance Certificate/s as well as that the As-Built Drawings and manuals will have to be completed also in advance. Finally, the requirements of the applicable law on the works acceptance shall be taken into account by the Consultant as the compliance with these procedures is a precondition to the Operational Acceptance Certificate and thus advance notice will need to be given to the Employer, so that the required Reception commission can be timely formed; Calculate delay damages according to the Particular Conditions of the Contract/s and issue Notice of Employer’s Claim for delay damages or any other claims, where applicable.

The required procedures and formats to carry out these tasks shall be prepared by the Consultant and submitted for the approval of the Employer in the Inception Report.

The Consultant shall note that MEPIU/Employer/Client is under obligation to seek the Bank’s approval before agreeing to or implementing any modification or waiver of the terms and conditions of the Contract including granting an extension of the stipulated time for performance.

The Consultant will seek prior written approval of the Employer for the following:

1. verifying and approving any payment or Interim Payment Certificate;
2. agreeing / instructing any changes in the project design;
3. approving or issuing of any Change Order.
4. in the event of additional activities, the Consultant shall report on the relative merits of tendering vis-a-vis issuing a Change Order for such additional activities;
5. agreeing / approval of Price Adjustment Indices and base values;
6. approving a proposal for Change submitted by the Contractor/s;
7. determining any new rate or price with respect to any Change;
8. approving (after Bank’s No-objection) any extension of the Time for Completion;
9. granting any claim for any additional cost including any cost associated with extension of Time for Completion;
10. suspending the performance of any or all Contractor’s obligations in accordance with GCC 41.

Any response by the Consultant which requires Client’s approval, except as otherwise expressly specified, shall be notified in writing to the Contractor within 30 days of receipt (14 days for the Consultant, 10 days for the Employer, and 6 days for the Consultant to consider Employer’s comments).

In case any delay in activities will be caused by slow response / initiative / determination or any other actions required and /or expected of the Consultant, the Consultant will have to then extend their services for the respective period without extra payment, unless the delay was outside his reasonable control and cannot be envisaged by the professional consultant experienced in the Services.

1. *Quality Control*

* Develop a Quality Management Plan (QMP) for all aspects of the Project;
* Receive from the Contractor/s the full particularised version of their Quality Assurance Manual in English and local language; as soon as possible check and comment upon the same and, if necessary, request the Contractor/ to amend the same;
* Participate, document and ensure that Factory Acceptance Tests (FAT) and Site Acceptance Tests (SAT), covered by the Contractor/s, are executed according to the technical specifications for the OHTL and Substations. The respective costs shall be covered by the Contractor/s. Issue and sign minutes on the compliance of the tests with the technical requirements of the Contract/s;
* Monitor and participate in all commissioning, testing and acceptance procedures, as well as other testing procedures required by Employer;
* Make Audit of the Contractor/s’ and Sub-Consultants' QA implementation;
* Notify the Client if there is any failure of tests or inspection and if such failure is anticipated to cause delay to any Completion Date or other material adverse consequence; advise on further tests required and arrange that the Contractor/s carry out necessary rectification;
* Carry out oversight inspection of the work being executed by the Contractor/s to provide assurance as to the quality and standards of the materials and workmanship, and compliance with the specifications and drawings as included in the Contracts, the Approved Design, the Detailed Drawings, the Method Statements, the Quality Assurance Manual and any agreed amendment thereto;
* Request the Contractor to make available for review copies of all test results within a reasonable time of the test being carried out;

1. *Construction Risk Assessment*

The Consultant will have the following obligations:

* Identify the hazards for the construction stage. This must comprise procedural risks, environmental and social risks, technical and quality risks, risk of cost overrun, risk of delays, risk to third parties, etc.
* Assess the likelihood of these risks and the potential consequences;
* Identify possible mitigation measures; and
* Proactively and continuously seek to manage and reduce/eliminate hazards/risks.

1. *Archaeological Remains*

The Consultant will have the following obligations:

* Receive and approve the procedure of archaeological remains and find chance procedure developed by the Contractor/s. The procedure shall establish, inter alia, the communication channel to the Consultant and State Archaeology Authority in the event of the discovery of any fossils, coins, articles of value or antiquity or other similar remains, dangerous dumpsites, hazardous contamination or munitions within the Site and advise the Client in relation to the steps to be taken in consequence thereof and the time and cost implications of such steps;
* Decide any extension of time and any additional payment to which the Contractor/s is entitled in accordance with the terms of the Contract/s as a result of discovery of any archaeological remains or dangerous dumpsites;
* Where necessary, require the Contractor/s to provide and maintain at their own cost all lights, guards, fencing, warning signs and watching, for the protection of the facilities or for the safety and convenience of the public or others.

1. *As-Built Drawings and Documentation*

The Consultant will have the following obligation:

* supervise, verify and approve the Contractor’s “as-built” drawings.

1. *Site Management and Monitoring Progress*

The Consultant will have the following obligations:

* Attend site meetings and endeavour to ensure that at all times outstanding problems are settled in order to avoid any delay or extra expenditure (having regard, however, to the terms of the Contract/s and the limitations on the authority of the Consultant/s referred to under these ToRs).
* Keep full and proper records of all meetings and discussions attended or conducted by the Consultant and make the same available for inspection by the Client forthwith on request.
* On request of the Client, attend meetings to resolve differences of opinion on general or technical matters.
* Ensure that the Client receives timely notice of and is permitted to attend all site meetings and other meetings with the Contractor/s.
* Notify the Contractor/s if the Consultant objects to any person who has conducted himself as incompetent or negligent; notify and advise the Client if this is the case and agree on any action to be taken.
* Advise the Client on the general organisation of the Contractor’s resources at the Site, including management and programming systems, manpower, plant and equipment.
* Advise the Client on compliance by the Contractor/s with respect to sub-contracting (if the case), as specified in the Design, Supply and Installation type of Contract.
* Report on the progress of the activities to ensure completion within the time established in accordance with the Contract;
* If for any cause other than those listed in the Contract/s, the rate of progress of the activities or any Section is at any time, in the Consultant’s opinion, too slow to ensure the completion of the activities or any Section by the Completion Date, instruct the Contractor/s in accordance with the conditions of Contract/s in writing with a copy to the Client;
* Receive from the Contractor/s due copies of formal quarterly and monthly Progress Reports, in accordance with the Contract/s, checking the same to ensure that they cover all relevant aspects of the Design, Supply and Installation Works, and highlight actual or potential departures from the Programme or the Milestone, Payment or Design Submission Schedules and stating the proposed or necessary measures to be taken by the Contractor/s to overcome such departures; commenting on and supplementing as necessary such Progress Reports before forwarding them to the Client, and advising of any necessary measures to be taken to achieve completion of each Section within the applicable Time for Completion;
* Convene formal monthly meetings (“Project Team Meetings”) and ad-hoc meetings, upon necessity, with Project stakeholders and other relevant parties. These meetings must have a formal agenda and minutes;
* Request the Contractor/s to provide an expected monthly cash flow requirement.
* Verify that the progress is in compliance with the Programme Schedule approved under the Contract/s on behalf of the Client. Notify the Client as far as possible in advance of any possible failure to attain the Design, Supply and Installation Programme by the applicable date or non-compliance with the Programme.
* Authorise, with Client’s prior approval, any reasonable request by the Contractor’s to work outside agreed time windows (e.g. at night or on locally recognised holidays) to expedite progress so as to comply with the Completion Date for the Design, Supply and Installation or any Section.
* Check the provision of all necessary insurance, performance securities and warranties and other relevant contract documentation.
* Report immediately any environmental and social incidents and accidents occurred on construction sites, indifferent of complexity and gravity and take actions by stopping construction activities and keep situations under control by communication with hospitals, firefighting authority and other state authorities.
* Ensure that occurred incidents/accidents are investigated properly and assist contractor to investigate incidents/accidents and report investigation results to the Client and State Authority for labour management.

1. *Defect Liability Period*

During the second Stage (II) of the assignment, subject to the successful performance of the Consultant in Stage I, the Consultant shall provide sufficient on-site supervision of the Contractor/s’ operations during the whole Defect Liability Period of 12 months (if any), corresponding to the last section of the Project accepted as completed.

During the entire Defect Liability Period, the Consultant will be responsible for supervision and monitoring the Plant and facilities. If during the Defect Liability Period any defect should be found in the design, engineering, materials and workmanship of the Plant supplied or of the work executed by the Contractor, the Contractor shall promptly, in consultation and agreement with the Consultant/ Beneficiary/Employer/ regarding appropriate remedying of the defects, and at its cost, repair, replace or otherwise make good as the Contractor shall determine at its discretion, such defect as well as any damage to the Facilities caused by such defect in accordance with the Clause 27 of the Contract Conditions.

1. *Default, Delays, Claims and Disputes resolution*

Prior to certification of any payment to a Contractor/s in relation to a Contractor/s’ claim, the Consultant will have consulted with the Client on the grounds on which the Consultant intends to certify the payment. The Consultant will provide the Client with any particulars to enable the Client to establish its position with regard to the Consultant’s certificate.

* Check that the Contractor/s continue to give the details and notices that are required under the Contract/s relating to any delay, and forward such details and notices to the Client;
* Notify the Client immediately if a Contractor fails to complete any Section within the applicable Time for Completion or appears likely so to fail;
* Assist the Employer with analysis of circumstances and issue of recommendations when/if the Contractor/s considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Contract/s Clause or otherwise in connection with the Contract/s;
* Advise the Client on any difficulties that may arise generally in connection with the Design, Supply and Installation of the facilities;
* Assist the Client in the process of receiving and dealing with notice of the intention of a Contractor/s to claim any additional payment within the times stipulated in the conditions of Contract/s and adopt the stipulated process for claim resolution, notifying the Client thereof;
* Upon the request of the Contractor/s/Employer, discuss the delay, the reasons therefore, determine and notify the Contractor/s of any extension of time and any amendments to any of the Milestone, Payment and Design Submission Schedules. Where the delay is the result of any of the causes referred to in the Contract/s or where an extension of time has been granted, consult with the Contractor/s on behalf of the Client, and send to the Client for its review, such revisions to the Programme, Milestone, Payment and Design Submission Schedules which the Contractor considers necessary in consequence of any such delay or extension of time;
* If any urgent remedial activities are necessary, act in accordance with the Contract/s, and otherwise advise the Client on carrying out the same by the Contractor/s or, if impossible to do so, discuss such failure with the Client.
* Work with the Client and the Contractor/s to set up the Dispute Board, as required under Conditions of Contract/s, and follow up all requisite processes in addressing the Contractor/s’ or Client’s claims.
* If necessary, prepare a case for the application of Liquidated damages for delays or a claim against the Performance Guarantee where a Contractor/s has failed to perform;
* If any dispute or difference is referred to arbitration, assist the Client generally in respect of such arbitration provided always that the Consultant will not be required to act improperly or contrary to his obligations under the Contract/s.
* In the event of termination, provide advice and assistance in connection with the departure of the Contractor/s from the site and the assignment of the benefit of any agreement for the Design, Supply and Installation.
* Advise the Client of their rights upon the occurrence of any Force Majeure event.

1. *Completion, Commissioning, Operational Acceptance and Defect Liability Period*

* Assist the Employer, within the terms and conditions stipulated in the Conditions of Contract, with issues, upon receiving a request from a Contractor/s, to issue a Completion Certificate;
* After receipt of such a request, inspect the plant and facilities with a representative of the Client/Employer/Beneficiary within the time period specified in the Contract/s;
* Provide support to the Employer in organising the Reception Commission;
* Taking into account any comments of the said parties, give instruction in writing to a Contractor specifying all the activities required to be executed by the Contractor before the issuance of a Completion Certificate; notify the Contractor of any defects in the Design, Supply or Installation affecting Completion that may appear after giving such instructions and before completion of the activities specified therein; provided that the Contractor has completed the activities so specified and remedied any defects so notified to the satisfaction of the Consultant and the Client. Inform the Employer about the possibility to issue a Completion Certificate within the period prescribed in the Contract/s;
* Upon acceptance of plant and facilities installed under the Contract/s, as well as in preparation for the commissioning of the facility, check the actual readiness of each type of structures, plant and facility as a whole, the availability of properly finalised executive documentation, verify the availability of fixed and installed equipment listed in acts of acceptance, with actual availability on the object;
* Participate in Functional Guarantee Tests of the Facilities to be performed by the Contractor/s intended to achieve the Functional Guarantees prescribed in the Contract/s and communicate to the Client/Employer of any deviations or the respective successful performance;
* Instruct a Contractor to search for defects and the cause thereof and to execute all such activities of amendment, reconstruction, and remedying defects, shrinkage or other faults during the Defect Liability Period as prescribed within the Contract;
* In the event that a Contractor refuses to carry out any rectification activities, assist the Client in proceeding to do such activities, following the issue of notice to the Contractor, the reasonable costs incurred by the Employer in connection therewith to be paid to the Employer by the Contractor or be deducted by the Employer from any monies due the Contractor or assist the Client/Employer to claim them under the Performance Security;
* Advise the Client of the value of any completed Section and of any further information as may be necessary for calculating any adjustment in the amount of the Performance Security and any securities procured by the Contractor/s to secure its obligations;
* Notify the Client immediately if a Contractor is failing to comply with its obligations under the respective Contract. Discuss with the Client possible remedies, and advise on the rights and obligations of the parties under the Contract;
* As soon as may be practicable after any entry and termination by the Client/Employer in accordance with a Contract, assist the Employer in adopting the procedures and conditions stipulated in the respective Contract;
* If any urgent remedial work is necessary, advise the Client on having it carried out by the Contractor/s or, if impossible to do so, discuss such failure with the Employer;
* In the event of termination, provide advice and assistance in connection with the departure of a Contractor from the site and the assignment of the benefit of any agreement for the Design, Supply and Installation activities;
* In the event that the Contractor refuses to carry out any rectification work, assist the Client in resolving the situation;
* Advise the Client of the value of any completed Section and of any further information as may be necessary for calculating any adjustment in the amount of the Performance Security and, if the case, of any other bonds or securities procured by the Contractor to secure its obligations.

1. *Payments and Accounts*

The Consultant should carry out the duties of the Consultant in relation to payment of the Contractor/s’ activities in accordance with the Contract/s:

* Receive from the Contractor/s on a monthly basis invoices pursuant to the Contract/s.
* Upon receipt of the Contractor/s’ invoices, copy to the Client each such invoice and give due consideration to any comments of the Client.
* Check in accordance with the relevant provisions of the Contract/s the Contractor/s’ invoices and resolve with the Contractor/s, where possible, any mistakes and queries which may arise in conjunction therewith; advise the Client of any adjustments considered necessary.
* Ascertain the amount to be certified in respect of the Contractor/s’ invoices pursuant to the Contract/s. Within the times stipulated in the Conditions of Contract/s, issue a certificate addressed to the Contractor/s and the Client specifying the aggregate amount payable by the Client to the Contractor/s.
* Certify any additional amounts due to the Contractor/s in respect of valid claims notified in accordance with the procedure set out in the Contract/s.
* Consider any invoices submitted by the Contractor/s pursuant to the Contract/s and certify any additional sums which the Consultant is empowered to certify as due, provided always that the Contractor/s has supplied sufficient particulars to enable the Consultant to determine the amount due.
* Collate and prepare quarterly budgets showing sums anticipated to fall due from the Client to the Contractor/s, dates and amounts of invoices and certificates under the Contract/s and values expected to be achieved in the quarter and deliver the same to the Client forthwith.
* Fully comply with the procedure for disputed certificates set out in the Contract/s. Forthwith carry out any correction or modification of any certificate or other action authorised by the Contract/s whenever the Consultant considers it appropriate to do so.
* Within the times stipulated in the Conditions of Contract/s after receipt of this draft Final Payment Certificates (Completion and Operational Acceptance Certificates), work with the Contractor/s to agree a Final Statement.
* Maintain Contracts accounts and prepare final Contracts’ Statements.

1. *Change Orders within Plant Design Supply and Installation Contracts*

The Consultant will note that the Client is under obligation to seek the Bank’s approval before agreeing to or implementing any material modification to the terms and conditions of any Contract.

The Consultant will assist the Client to comply with the procedures agreed with the World Bank.

Unless, in the opinion of the Consultant, an emergency occurs affecting the safety of life or of the Works or of adjoining property, the Consultant will provide a preliminary report to the Client on any prospective Change, outlining the basis for the consultant’s valuation of the Change, including but not limited to the following:

* The Consultant’s opinion on the extent, if any, of applicability to the varied activities of the rates and prices set out in the Contract/s; when expressing an opinion, the Consultant will take into account the actual or expected currencies of cost (and the proportions thereof) of the inputs of the varied activities without regard to the proportions of various currencies set out in the Contract/s;
* The quantity and the value of the varied plant and/or facilities that can be determined using the rates and prices set out in the Contract/s;
* The quantity and the Consultant’s estimate of the value of the varied activities, which can be determined using the rates and prices set out in the contract as the basis for valuation: the Consultant will provide a detailed breakdown of the rates and prices set out in the Contract and identify the price components that the Consultant used or intends to use for the valuation of the varied activities;
* The quantity and the Consultant’s estimate of the value of the varied activities, which can only be determined using the rates and prices to be agreed upon between the Consultant and the Contractor/s. The Consultant will provide to the Client with an appropriate justification of the basis for the agreement.

In case of a Change, the Consultant will follow the procedures and conditions stipulated within the Plant Design, Supply and Installation Contract/s Conditions:

* However, in the event that the Client orders changes to the Approved Design, and if the compliance with such order has, in the opinion of the Consultant, materially delayed or is potentially likely to delay the Completion Date for the Supply and Installationof any Section, determine the extension of time and the additional payment to which the Contractor/s will be entitled in accordance with the terms of the Contract/s.

1. *Suspension*

If in the Consultant’s opinion, a suspension of performance under the contract is required, the Consultant will initially consult with and seek the approval of the Client. After receiving their approval to issue a suspension, the Consultant will follow the procedures and conditions established in the Contract Conditions.

1. *Reporting Requirements and Time Schedule for Deliverables*

During the period of the services, the Consultant will provide the Employer with the following reports (2 copy in Romanian and 2 copy in English and an electronic copy in English and Romanian):

i. *Inception Report*: within one month of the effective date;

ii. *Consultant’s Services Programme Report*: within 21 days of receipt of the Contractor’s Work Programme;

iii. *Monthly Progress Reports*: within 10 days of the end of each calendar month;

iv. *Change Order Reports (if required)*: no later than 14 days from the moment when the Consultant becomes aware that a Contract Change order may be required;

v. *Report on Completion of Works*: within 28 calendar days upon issuing the Completion Certificate for each contract;

vi. *Claims Reports (if required)*: a) for preliminary assessment of the validity of the Contractor’s potential Claim no later than 7 days from the date of receipt of the respective Notice to Claim; b) for a detailed analysis of the validity of the Claim no later than 21 days from the date of receipt of such Claim;

viii. *Draft Final Report*: Prior to last two months of the assignment;

ix. *Final Reports*: 1) immediately upon issuing the Final Payment Certificates (Completion and Operational Acceptance Certificates); 2) after the completion of the Consultant’s assignment covering the Defect Liability Period;

x. *Contract Completion Report:* After successful completion of both Stage I and Stage II;

xi. *Special Reports (if required)*: within two weeks from the Client’s request.

1. *Inception Report*

Within one month of the Effective Date, the Consultant shall prepare and submit to the Employer the Inception Report showing Consultant’s models for the monthly reports, Interim Payment Certificates, refine staff mobilization schedule, time reporting systems, Project Management Information System, define the responsibilities to be delegated, establish the communication procedures with the Employer, Beneficiary, and the required procedures and formats to carry out the Design, Supply and Installation contracts administration tasks.

*ii. Consultant’s Services Programme Report*

Within 21 days of receipt of the Contractor’s Work Programme, the Consultant shall submit a report to the Employer Consultant’s Services Programme Report, which shall indicate the Consultant’s opinion and comments on the Contractor’s Work Programme or any update and/or revision thereof.

In the case where the Consultant has made comments the Report will indicate the reasons for the comments.

In the event that the Consultant considers the Contractor’s Work Programme acceptable, the Consultant’s Report will include the following:

1. Copy of the Contractor/s’ detailed programme of performance, showing the order in which the Contractor/s intends to carry out the activities under the contract with the highlighted critical path/s, including general description of the methods which the Contractor/s intends to adopt, and of the major stages, in the execution and acceptance of the facilities, Contractor/s’ key equipment and personnel mobilization plan, and other information as may be deemed necessary and appropriate by the Consultant, including coordination arrangements with other Employer’s, Beneficiary’s, Contractor/s’ personnel, if any;
2. Copy of the Contractor/s’ detailed cash flow estimate, including a monthly breakdown of all prospective payments forecast to be made to the Contractor/s under the Contract/s;
   * 1. A supporting report which will include:
        + A list of critical path items and the related Contractor/s’ estimates of delivery periods, accompanied by the Consultant’s estimate of the latest delivery periods for each critical path item to warrant the completion in accordance with the Contract/s;
        + Consultant’s opinion on the requirements in the Contractor/s’ proposed Programme for the information the Contractor/s reasonably requires from the Employer, reasonableness of the envisaged order and timing when that information is required, and all Employer’s activities and constraints (such as approvals/reviews, etc.) and risks arising thereof;
        + For the manufacture of each main item of Plant and Materials, the name of the manufacturer, manufacture location and the expected dates of:
        + Commencement of manufacture;
        + Contractor/s’ and/or the Consultant’s inspections and tests; and
        + Shipment and arrival at the Site.

* Materials and plant selected by the Consultant for inspections and tests, including an appropriate specification of the tests to be carried out and the associated arrangements;
* Names and particularities, including gender, of the Contractor/s’ representative and other superintendence personnel approved by the Consultant in accordance with the Contract/s;
* Names of subcontractors consented by the Consultant in accordance with the Contract/s and, for each subcontractor, the cost and quantity of the subcontracted Works; this section will include a brief justification for the Consultant’s consent;
* The details of a Project Management Information System (PMIS), acceptable to the Employer, for efficient and timely management of correspondence and documents form the Contractor/s, Employer and other stakeholder(s), as applicable, to be compatible with Employer’s Management Information System (MIS) requirements, also including an implementation schedule.
  + - * Copies of all notices, consents, approvals, certificates or determinations given or issued by the Consultant within the reported period;
* Summary of the main actions with their estimated timing required of the Employer during the Contract/s execution, summary of the issues under the contract guarantees and insurances with their key terms and matters for the client to pay specific attention to, such as expiry dates etc., and
* Other information as may be required by the Client.

*iii. Monthly Progress Reports*

The Consultant will prepare and submit to the Client Monthly Progress Reports within 10 days of the end of each calendar month. The first Report will cover the period up to the end of the first calendar month following the Consultant’s mobilization. Each Monthly Progress Report will include:

1. Brief summary information about any events or circumstances (including ES aspects) which, in the Consultant’s opinion, may create sufficient grounds for any time, claim and/or cost overrun under a Contract/s and the Consultant’s recommendation of the measures being (or to be) adopted to overcome such events or circumstances and the contractual basis thereof;
2. Brief summary information on Contractor’s ESMP development, approval and implementation, the recommendations proposed by the Consultant for improving CESMP developed by the Contractor, the measures taken for solving identified non-conformity/ies on construction site/s and review the effectiveness of correction actions taken by the Contractor to solve non-conformity/ies;
3. Comparison in the form of a chart showing the Contractor/s’ original cumulative cash-flow estimate, in monthly periods, of all payments to which the Contractor/s will be entitled under the Contract/s and the actual payments certified by the Consultant up to the end of the reporting period. In the event of the cumulative amount of the actual monthly payment certificates being lower than the Contractor/s’ estimates, the Consultant will accompany the chart with a supporting report and provide:

* Details of any events or circumstances that have caused the discrepancy;
* Assessment of the significance of such events or circumstances, including the Consultant’s opinion on whether these may jeopardise the completion in accordance with the Contract/s;
* Report on the measures being (or to be) adopted to overcome delays in respect of each event or circumstances and the contractual basis thereof;

1. Comparison of the actual percentage completion of delivery compared with the planned for each critical path item identified in the Consultant’s Services Programme Report; where any delivery is behind the Programme, the Consultant will comment on the likely consequences and state the remedial action being (or to be) taken;
2. Comparison of the actual percentage completion of delivery compared with the planned for each main item of Plant and Materials, if not included in the list of critical path items;
3. Projection on Contract/s’ total final price and the completion date;
4. Photographs showing the status of manufacture and of progress on the site;
5. List of new quality assurance documents, reports on test results and certificates of materials;
6. Safety statistics, as provided by the Contractor/s, including details of any major incidents and activities (e.g., strikes, riots, demonstrations, media attention, etc.) relating to workers, public, and environment, any type of allegation (sexual exploitation, sexual abuse or sexual harassment), gender and age of the person who experienced the alleged incident should be included in the Report;
7. Brief summary information on compliance with applicable environmental and social laws of Republic of Moldova and norms and regulations of the World Bank regarding site organization, black soil storage, consent from local community regarding materials storage, personnel medical control, etc.|).
8. List of all notices, consents, approvals, certificates or determinations given or issued by the Consultant within the reported period, including consents to the Contractor/s’ Performance and the Advance Payment Securities;
9. Brief summary of issues related to use or acquisition of private lands, if any; and
10. Grievance log including list of grievances received, resolved, outstanding issues and redress status;
11. Other information, as may be required by the Client.

The reports have to be concise and contain only critical information related to progress, issues and key events for the month. The Consultant’s Monthly Report should not exceed 20 pages per contract, except for photos which should only be submitted electronically and the above requested copies of the project documents. Only critical correspondence should be provided, as the annexes.

*iv. Change Orders Reports*

The Consultant shall note that the Employer must seek the no-objection from the Bank prior to the approval of any contract Change, change, modification, claim determination, extension of time and/or additional cost.

The Consultant must therefore prepare Change Orders in sufficient detail, accuracy and clarity to ensure that the Employer can comply with the Bank’s procedures for the approval of Contract/s Changes etc.

The Consultant shall immediately advise the Employer (in writing) as soon as he become aware that a Contract/s Change/s order/s may be required. He shall then prepare and submit within 14 days an analysis of the Change, or in cases where external rates / costs are involved (for example utility works) an estimate of when the analysis will be submitted.

The Consultant must ensure that wherever possible existing or similar rates that exist within the Price Schedule must be used.

The report shall outline the basis for the Consultant’s valuation of the Change including but not limited to the following:

* Whether the activities were unforeseen and under whose risk (Client’s or Contractor/s’) the consequences fall in accordance with the Design, Supply and Installation Contract/s;
* Whether the activities fall under Change or not and if not then what are the advantages of an amendment of the contract vs bidding the extra scope out;
* Assessment of the time implication with potential prolongation costs and analysis of whether a Change is warranted in a separate bidding procedure;
* The quantity and the value of the varied activities that can be determined using existing rates and prices set out in the contract;
* The quantity and the Consultant’s estimate of the value of the varied activities, for new plant and/or facilities which can be determined by using similar rates and prices set out in the contract as the basis for valuation;
* The quantity and the Consultant’s estimate of the value of the varied activities that require the development of new rates using external quotations/ cost estimates from specialised sub-contractors (e.g. electrical, communications);
* The Consultant shall provide a detailed breakdown of the rates and prices set out in the contract and identify the price components that the Consultant used or intends to use for the valuation of the varied activities;
* The quantity and the Consultant’s estimate of the value of the varied activities, which can only be determined using the rates and prices not set out in the Contract/s;
* The Consultant shall provide to the Client an appropriate justification of using rates and prices not set out in the Contract/s with the evidence of at least three quotes from the market to confirm the reasonableness of the suggested rates.

In case a Change is approved by the Employer, the Consultant shall immediately issue the Change Order to the Contractor. He shall adjust the Price Schedule to reflect the changes made by the Change Order.

*v. Report on Completion of works*

On completion of the Design, Supply and Installation Contract, upon issue of the Completion Certificate, within 28 calendar days the Consultant shall submit a Completion Report, which shall include but not limited to, copies of the Completion Certificate(s); verified “as-built” drawings showing all revisions to the design of the plant and facilities; an analysis of the completion cost of the activities; an overview of the actual progress of the activities detailing reasons for delays and/or extensions of time; an overview of Site safety procedures, any problems in this regard and recommendations for improvement; an overview of the Contractor’s working practices and resources; an assessment of the quality of Materials and workmanship, any problems in this regard and recommendations for improvement; details of technical difficulties encountered and how these were overcome; details of administrative difficulties encountered and how these were overcome.

*vi. Claims Reports*

The Consultant shall implement the procedures for Claim management as set out in the General Conditions of the Design, Supply and Installation Contract(s) clause 45.

The Consultant shall prepare and maintain a detailed register of all claims and potential claims.

A summary of the status of Claims, Notices of Claim and potential Claims shall be included, updated and reported by the Consultant in each Monthly Progress Report to the Client. The summary must clearly show the current status of each Claim and events that may have occurred in the reporting period, and actions planned by the Consultant.

In the event of the receipt of a Notice of Claim, or Claim from the Contractor/s the Consultant shall immediately notify, and provide a copy of the Contractor/s’ Notice of Claim to the Client, and record the Notice into the Claims Register.

The Consultant shall conduct a detailed analysis of all claims. The Consultant shall involve and coordinate work with project team members to obtain relevant background information and supporting documentation.

Each Claim must be assessed individually on its relevant merits.

The Consultant shall submit to the Employer a preliminary assessment of the validity of a Notice of Claim within 7 days of receipt of the Contractor’s Notice and provide an assessment (including a risk assessment) with regard to the potential impact and outcome of the claim.

The Consultant shall advise what steps can be implemented to mitigate the potential impact of the Claim if it is formally submitted.

The Consultant will propose to the Employer solutions that may prevent a Notice of Claim becoming a formal Claim.

The Consultant shall require the Contractor/s to copy to the Client all details sent to the Consultant with regard to the submission of a Contractor/s’ Claim/s.

The Consultant shall prepare all necessary letters and transmittals to be issued in respect of claims or potential claims.

*viii. Draft Final Report*

Two months prior to the assignment completion, the Consultant shall prepare a first draft final report which shall highlight all major points of interest that arose during the contract implementation. The report will include, amongst others, the summary of the type, quality, quantities and sources of materials used on the project; Contractor/s’ plant and personnel; problems encountered and solutions employed; changes made by the Contractor/s in design and specifications and the reasons therefore; a breakdown of Contractor/s’ performance in terms of respect of the Service Quality Criteria for maintenance services; a breakdown of the final cost of the contract item by item; a summary of Contract/s changes; a summary of all related accidents happened during the contract execution.

*ix. Final Report (Stage I)*

Upon completion of the Contract/s, i.e. immediately upon issuing the Final Payment, the Final Report shall be submitted by the Consultant which will take into account all comments, if any, provided by the Client to the draft final report.

*x. Report on Defect Liability Period (Stage II)*

Upon completion of the 12 months of Defect Liability Period the Consultant shall submit the Report on Defect Liability Period that will include all the identified defects in the design, engineering, materials and workmanship of the Plant supplied or executed works, Consultant’s input in solving them and remedying of the defects by the Contractor.

*xi. Contract Completion Report (Stage I + II)*

Upon completion of both Stage I and Stage II the Consultant shall submit a Report which summarizes the outcomes of both completed stages.

*xii. Special Reports*

If required and at the request of the Client, within two weeks from any such request, the Consultant shall prepare a Special Report on any major issue raised by the Contract/s implementation, including (but not limited to) modification of Drawings.

* 1. **Equal Opportunity**

Integrating gender into improvement plans for Client and Consultant performance will enhance policies, procedures, and documentation by addressing barriers to achieving a level-playing field for women and men. Consultant is expected to ensure that supervision services includes measurable activities related to strengthening/ safeguarding equality of opportunity, and that these are implemented and monitored using appropriate resources and indicators.

# DELIVERABLES

The Consultant will provide the Client and the Beneficiary with information, designs, data and documentation through submission of periodic reports prepared during the course of its service or specific reports prepared at the request of the Client in relation to the design, construction, completion, testing or commissioning of the Works.

Reporting will include at least the listed above in this ToR, under point o*) Reporting Requirements and Time Schedule for Deliverables*.

For practical reasons it is proposed to allow a delay of 10 (ten) working days in submission of the reports in Romanian language due to the translation efforts.

All reports issued by the Consultant shall be reviewed and approved by the Client. A period of two weeks shall be allowed for the review and approval.

In addition, the Consultant will:

* Document the work through Working Papers, Issues Papers and Memoranda in Romanian and/or English, as appropriate; and
* Prepare and maintain full and proper records of all meetings and discussions.

# IMPLEMENTATION ARRANGEMENTS

The Client expects to appoint the Consultant in October 2021.

* 1. **Implementation Arrangements**

The Design, Supply and Installation Contract/s are scheduled to be signed in the second half of the year 2021 and is/are expected to have a duration of 32-42 months.

The Services to be provided by the Consultant are expected to last 47 months and will be divided in two (2) Stages. The first Stage (I) includes 1 month for pre-commencement activities, 34 months of works supervision and closing activities (to be contracted on a time-based principle). The second Stage (II) will cover the supervision and monitoring during the 12 months of Defect Liability Period and will be contracted on the basis of a lump sum remuneration. This will be subject to the successful performance of the Consultant in Stage I.

The time period may be changed by written agreement between the parties.

**NOTE:** *The scope of the assignment includes upgrade/extension of 2 existing substation (Chisinau and Vulcanesti). According to the Project documentation, an alternative connection scheme of 400 kV OHTL is foreseen. SE “Moldelectrica” has proposed an alternative connection scheme, where the OHTL connects from Chisinau SS directly to the Back-to-Back station that will be constructed, while BtB is then connected to Vulcanesti SS and Romanian Isaccea SS. Presumably the alternative connection scheme has slightly better reliability by creating a loop among Chisinau‐BtB‐Vulcanesti‐MGRES‐Chisinau, however it will require construction of the additional 400 kV bay in the BtB, and will not require construction of the Vulcanesti SS. The Project documentation will be designed to allow modifications of the final connection scheme as the Project progresses.*

*Considering the above, the Consultant is advised, in the Breakdown of costs, to set the price of the activities envisaged for Vulcanesti SS separately, in case the alternative solution would be selected and no constructions will be required at Vulcanesti SS.*

* 1. **Facilities**

## FACILITIES TO BE PROVIDED BY THE CLIENT

1. *Services, facilities and property to be made available to the Consultant by the Client:*

* All available information, reports, documents, etc., related to the execution of the Contract/s shall be made available to the Consultant by the Client. The facilities to be provided to the Consultant are described in the Design, Supply and Installation Contract*.*

1. *Professional and support counterpart personnel to be assigned by the Client to the Consultant’s team:*

* Counterpart personnel are not required*.*

The Consultant will supply all necessary computer hardware and software required to deliver the services, together with the necessary office equipment, which will be handed over to the Client at the end of the assignment.

The Contractor/s shall provide, furnish and maintain contract/s offices for use by the Consultant and his staff on the site/s. The contract offices shall be at locations provided by the Contractor/s and approved by the Consultant. An indicative description of the offices and furniture to be provided by the Contractor/s is presented in Chapter 2.25.5 Site Office Including Equipment for the Employer– Part 2 - Employer’s Requirements.

In case the Contractor/s will use any proprietary software for design and planning, free use of a license for it would be provided to the Consultant for the duration of the services.

The Contractor/s shall provide and maintain Laboratory offices equipped with necessary laboratory equipment, including an office for the Consultant at each Laboratory.

The Client may assist the Consultant in obtaining any entry/exit visas, etc. However, any related costs shall be borne by the Consultant.

All other costs shall be borne by the Consultant and shall not be reimbursable. The Consultant will provide residential accommodation for their specialists, and local and international transportation, mobile telephones, topographical survey equipment, all necessary local support staff such as secretaries/interpreters, drivers, office assistants, field assistants, as well as any other goods, equipment or services for successful execution of Consultancy Services. The Consultant will also be responsible for all salaries, fees, allowances, insurance, leave pay and taxes for the staff involved in the assignment.

All employees, including the Consultant and the Contractor/s’ personnel engaged in the activities related to the implementation of the project, must fully respect prescribed measures for occupational protection and also additional measures related to COVID-19 pandemic, all in accordance with the recommendations of the World Health Organisation and authorities of the Republic of Moldova.

The Consultant should also take into account both World Bank’s guidance materials regarding coronavirus –pandemic - see [https://www.IBRD.com/sustainability-covid.html](https://www.ebrd.com/sustainability-covid.html).

* 1. **Project Data and Documents**

All documentation related to the execution of the Project is and will remain the property of the Client after completion of the assignment. The Consultant shall not publish, use or dispose of this documentation without written consent of the Client.

The Consultant shall provide and maintain orderly working files and a comprehensive, computerized log for correspondence, minutes of meetings and conferences, submittal data, submittal registers, inspection and Monthly Progress Reports, contract documents including amendments, notice to commence, Change Orders and modifications, all in a Project Management Information System (PMIS), as approved by the Employer and compatible with the Employer’s Management Information System (MIS). The Consultant shall also maintain all detailed deliverable inventory, scheduled dates and actual status. During the course of the activities under the contract, the Consultant shall maintain any and all electronic and printed project documents in good order in its site office. From time to time, the Employer may request the Consultant to provide certain documents to interested parties, approved by the Employer. Documents of a sensitive nature should be stored separately in the reference library. Prior to completion of the final contract period, the Consultant shall deliver to the Employer any and all hard copies project documents, in good order and properly indexed and marked. Additionally, the Consultant shall provide the Employer with all electronic files of any and all project documents stored in a media acceptable to the Employer including a comprehensive, well-organized electronic index of all those documents. The copyright of all project materials and any software license used for the PMIS shall belong to the Employer.

The PMIS will be required to be compatible with standard office, database, project management and CAD software and Windows operating system.

# PROFILE OF THE CONSULTANT

The Consultant is required to provide independent, impartial technical, cost, strategic, management, financial and legal advice, and as such will not be permitted to have a commercial interest in any other contracts or agreements related to the Project.

The Consultant shall prepare technical and financial proposals both for Stage I and Stage II and evaluated for the aggregate price.

The Consultant shall employ suitably qualified Experts and other professionals, competent enough to carry out their duties in accordance with responsibilities and/or authorities that are specified in these ToR. The Consultant must be or must include as a subconsultant, a Consultant(s) with a strong track record and demonstrable experience and expertise in the design, Consulting, Project Management, Construction of HV OHTLs, Construction or Extension/Upgrading of Substations, Commissioning/Testing, gained from at least three international projects during the last 10 years.

The Consultant shall retain personnel, with the required minimum qualifications for the assignment, covering the following tasks:

Project Management

Project Planning and Scheduling

Civil Consulting

Design of High Voltage Power Lines and 400 kV Substations

Construction Health & Safety

Monitoring/Supervision of Construction of HV OHTLs and Substations

Environmental & Social Management

Addressing sexual exploitation, sexual abuse and sexual harassment cases

Claims Assessment.

The indicative inputs and required qualifications for the project team are presented in the table below. However, the Consultant shall propose the time commitment for each of the key staff in the proposal.

All key personnel shall be fluent in English, and knowledge of the local languages will be considered an asset, and be fully computer literate, word processing, spreadsheet, etc.

Consultants are encouraged to associate with local firms and include in the team local Technical Support Staff.

In the Client view, the Consultant Team shall comprise (but not necessarily be limited to) the following key personnel:

**Consultant’s Staffing**

| **Position** | **Qualification Requirements** | **Indicative Input  Man-Months** |
| --- | --- | --- |
| **1. Key Experts:** | | |
| A. Project Manager (Team Leader) | * Minimum B.Sc. degree in electrical / high voltage / power system engineering or similar; * Minimum 15 years’ planning, implementation and monitoring of international projects, with regard to Substations or OHTLs of at least 330 kV; * Minimum 8 years’ experience as Project Manager or Team Leader of multi-disciplinary teams in the design and construction under similar projects; * Familiarity with and experience & knowledge of the procurement policy and rules of international financial institutions such as the Word Bank, EBRD and knowledge of Word Bank Plant Design, Supply and Install conditions of contract; * Permanent employee of the Consultant for a period of minimum 3 years within last 7 years. | 32 |
| B. Resident Project Manager | * Minimum B.Sc. degree in electrical / high voltage / power system engineering or similar; * Minimum 15 years’ planning, implementation and monitoring of similar projects, with regard to Substations or OHTLs of at least 220 kV; * Minimum 6 years’ experience as Project Manager of multi-disciplinary teams in the design and construction under similar projects; * Familiarity with and experience & knowledge of the procurement policy and rules of international financial institutions. | 30 |
| C. Senior Transmission Line Engineer | * Minimum B.Sc. degree in electrical engineering or similar; * Minimum 15 years’ experience in providing Consulting services for supervision of construction works of the OHTLs (330 kV or higher voltage). | 25 |
| D. Senior Substation Engineer | * Minimum B.Sc. degree in electrical engineering or similar; * Minimum 15 years’ experience in providing Consulting services for planning, design and supervision of construction works of substations (330 kV or higher voltage). | 20 |
| E. Civil Engineer (Transmission Line) | * Minimum B.Sc. degree in civil engineering or similar; * Minimum 10 years’ experience in supervising the construction of OHTLs (330 kV or higher voltage), routing and foundations. | 25 |
| F. Environmental, Health & Safety and Social Expert | * Minimum B.Sc. degree in biology, environment or similar; * Minimum 5 years’ relevant work experience in managing occupational health, safety performance including implementation of environmental management plan of infrastructure project of at least one international contract technically similar in complexity, involving higher transmission lines. The specific experience process, according to Environmental and Social standards of World Bank and/or other IFI’s as well as according to Local laws would be an advantage. | 20 |
| Resettlement Planning and Social Development Specialist | * Minimum B.Sc. degree in social science or similar; * Relevant experience in resettlement planning, addressing gender-based violence, sexual exploitation, sexual abuse and sexual harassment etc.; * Minimum of 5 years’ experience in resettlement planning, according to Environmental and Social standards of World Bank and/or other IFI’s as well as according to Local laws would be an advantage. | 20 |
| **2. Non-Key Experts (field and home office staff)** | | |
| G. Civil Engineer | * Minimum B.Sc. degree in civil engineering or similar; * Minimum 10 years’ experience in supervising the construction of OHTLs (330 kV or higher voltage), routing and foundations. | 15 |
| H. Transmission Line Engineer / Design Review | * Minimum B.Sc. degree in electrical engineering or similar; * Minimum 15 years’ experience in providing Consulting services for planning, design and construction OHTLs (330 kV or higher voltage). | 15 |
| I. Mechanical Engineer | * Minimum B.Sc. degree in electromechanical or mechanical engineering or similar; * Minimum 15 years’ experience in reviewing the design, supervision of construction works of substations (330 kV or higher voltage). | 10 |
| J. Electrical Engineer | * Minimum B.Sc. degree in electrical engineering or similar; * Minimum 15 years’ experience construction and providing services for supervision of construction works of substations and OHTLs (330 kV or higher voltage). | 10 |
| K. Substation Engineer / Design Review | * Minimum B.Sc. degree in electrical engineering or similar; * Minimum 15 years’ experience in providing Consulting services for Consulting services for planning, design and construction of HV substations (330 kV or higher voltage). | 5 |
| L. Protection and Control System Engineer | * Minimum B.Sc. degree in relevant power system/technical discipline; * Minimum 10 years’ experience in construction of HV OHTLs and SSs; * Experience in preparing /reviewing the design/ drawing of protection and control system/supervision of installation, testing & commissioning of protection and control systems of 330 kV or higher voltage. | 15 |
| M. SCADA / Telecommunication Engineer | * Minimum B.Sc. degree in relevant power system/technical discipline; * Minimum 10 years’ experience in construction of HV OHTLs and SSs; * Experience in preparing /reviewing the design/ drawing of protection and control system/supervision of installation, testing & commissioning of protection and control systems of 330 kV or higher voltage. | 10 |
| N. Geologist / Geotechnical Engineer | * Minimum B.Sc. degree in relevant technical discipline; * Minimum 10 years’ experience in geotechnical engineering and soil mechanics. He should be familiar with local condition, slope and embankment construction, laboratory and in-situ testing and foundation investigations; * experience in construction of HV OHTLs and SSs. | 15 |
| O. Commissioning Expert | * Minimum Master degree in relevant power system/technical discipline; * Minimum 15 years’ experience supervision of construction and commissioning of HV OHTLs and SSs; * Experience in reviewing the design, supervision of installation, testing & commissioning of HV OHTLs and SS of 330 kV or higher voltage. | 8 |
| **3. Non-Key Experts (local)** | | |
| Q. Transmission Line Engineer(s) | * Minimum B.Sc. degree in electrical engineering or similar; * Minimum 8 years’ experience in providing Consulting services for design, and supervision of construction of HV OHLs of 110 kV and above voltage. | 20 |
| R. Substation Engineer(s) | * Minimum B.Sc. degree in electrical engineering or similar; * Minimum 8 years’ experience in providing Consulting services for design and construction supervision of HV Substations of 110 kV and above voltage. | 20 |
| S. Environmental/Health and Safety Specialist | * Minimum B.Sc. degree in relevant field; * Relevant experience in addressing sexual exploitation, sexual abuse and sexual harassment cases; * Minimum 5 years’ relevant work experience in managing occupational health, safety in infrastructure projects of at least one international contract. * Knowledge of IFIs and local legislation in this field. | 20 |
| T. Community Liaison/Social Specialist | * Minimum B.Sc. degree in biology, environment or similar; * Minimum 5 years’ relevant work experience in supervision of environmental compliance in civil engineering / infrastructure projects of at least one international contract. * Knowledge of IFIs and local legislation in this field. | 20 |