

**Republic of North Macedonia
Ministry of Finance**

**Public Sector Energy Efficiency Project
(P149990)**

MK-MOF-007-2023-CS-CQS

**Terms of Reference (TOR)
Supervision of Works for Replacement of Public Lighting System in Municipality of
Lozovo, Rankovce and Debrca**

I. Introduction

The global commitment to environmental protection and in particular to reduction of greenhouse gas emissions, North Macedonia's dependence on energy imports, as well as the need to secure greater variety and thereby reliability of energy supply undoubtedly impose increased share of renewable energy sources in the final energy consumption. However, in parallel with activities and measures targeting increased share of renewable energy sources, measures, and activities to increase energy efficiency of final energy consumption should be pursued. Thus, the target share of renewable energy sources in final consumption will be achieved much easily and faster, but the economy's competitiveness will also be improved due to reduced energy costs.

In partnership with the World Bank, Republic of North Macedonia is implementing the Public Sector Energy Efficiency Project. The project development objectives are: (i) reduce energy consumption in the municipal sector; and (ii) support the establishment and operationalization of a sustainable financing mechanism for the public sector. The project is supported by a €25 million equivalent IBRD loan, to support energy efficiency investments in public buildings and policy/TA to help set-up and operationalize an energy efficiency revolving fund. Physical investments will be needed to help develop the market for energy efficiency materials and services, while a transition plan is developed to move from the proposed Project Implementation Unit (PIU) structure to a more sustainable and permanent, independent fund.

The Project would include three components: (1) energy efficiency investments in the municipal sector; (2) technical assistance (TA) and project implementation support and (3) establishing of Energy Efficiency Fund.

The sub-component 1c (Technical studies to support investments) of the project would include consultancies to support the investment component, including development of detailed energy audit reports and detailed designs and technical specifications for buildings, feasibility studies for the street lighting projects, as well as supervision over the works. The Consultant firm will be selected based on the Consultants' Qualifications (CQS) method set out in the World Bank's Procurement Regulations for IPF Borrowers (July 2016, revised Nov 2017, Aug 2018 and November 2020); the 'Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants', dated October 15, 2006 and revised on July 1, 2016; and other provisions stipulated in the Financing Agreements.

II. Objective and scope of work for the supervision

The objective of the assignment of the Consultant is Supervision of Works for Replacement of Public Lighting System in Municipalities of Lozovo, Rankovce and Debrca ("**Sub-projects**") and Management Supervision during Defects Liability Period in accordance with Macedonian law for construction, location conditions, and the feasibility study.

The Project for Replacement of Public Lighting System, for which the Supervision is required will be as follows:

a. Municipality of Lozovo

Sub-Project for Replacement of Public Lightning system in Municipality of Lozovo includes replacement of existing 450 lights with LED where 168 are with power of 20W, 228 are with power of 40W and 54 are with power of 60W.

b. Municipality of Rankovce

Sub-Project for Replacement of Public Lightning system in Municipality of Rankovce includes replacement of existing 409 lights with LED where 234 are with power of 20W, 126 are with power of 40W and 49 are with power of 60W.

c. Municipality of Debrca

Sub-Project for Replacement of Public Lightning system in Municipality of Debrca includes replacement of existing 1412 lights with LED, 99 lights with a power of 40W, 23 lights with a power of 60W, 1248 lights with a power of 20W and 42 lights with a power of 20W intended for park lighting (in total 1290 lights with a power of 20W), which does not require photometry, or a total of 1412 lamps.

III. Scope of Services and Description of Consultant's Tasks

The Consultant shall be responsible to carry out supervision of all respective activities, performed and stipulated as a Contractor's obligations at the signed civil works contract agreement.

Detailed activities for each works for Replacement of Public Lighting System in the above stated municipalities are included in the feasibility studies. The consultant will get electronic copy of the feasibility studies for each Municipality that will be subject to this contract, upon signing of the contract.

Main duties of the Consultant are the following:

- The Consultant shall execute the services in accordance with latest positive laws of the Republic of North Macedonia, location conditions, contract documents, the feasibility study and this TOR.
- The Consultant shall also carry out the environmental and social supervision during the works for Replacement of Public Lighting System, in accordance with the site-specific Environmental and Social Management Plan ("ESMP) Checklists and their mitigation & monitoring measures.

Particularly, the Consultant shall check whether all safety measures have been taken when working on the installations, as well as traffic regulation and protection by the Contractor. The Consultant shall especially monitor that the lamps are dismantled carefully and left on a daily basis in the safe storage area, already defined and approved by the respective municipality, resulting with detailed evidence list, reviewed, checked and signed by the supervisor` environmental expert.

- The Consultant shall conduct inspections necessary for the materials, equipment, and check the certificates of the equipment and results of tests performed to prove the quality of materials and equipment. These activities will be described in detail in the Interim Progress Reports. The Consultant shall compile a record of all such tests and compare the results with the specifications, standards or with the performance criteria that has been guaranteed by the contractors.
- The Consultant shall arrange weekly and monthly meetings with the Contractor, inform the Client about progress of the work and activities, attend any meetings convened by the Client and provide any information or evidence required by the Client at any public meetings or inquiries which might be held in connection with the Sub-Projects.
- The Consultant shall check and verify the Contractor's quantities (including measurements) in the interim payment certificates ("IPC"), according to the Conditions of Contract and shall approve and sign IPC within 5 working days upon receiving of the IPC from the Contractor. The actual procedure and presentation of the IPC, supporting documents, etc. shall be discussed and agreed with the Client. The Consultant shall review and report on any technical and financial claims submitted by the Contractor within 3 working days of receipt of such claim submission. Report on any claim shall include (not limited to) determinations, the justification letter, all probable effects on approved work plan and the final decision on any variation.
- The Consultant must inspect all aspects of the sub-project for professional, qualitative, normative and quantitative specifications as described in the technical documentation accepted by the Client.
- All the correspondences received from the Contractor shall be reviewed, evaluated and responded the latest within 3 working days.
- The Consultant shall assist in the setting of all disputes or differences, which may arise between the Client and the Contractor, in a timely manner. In the case of litigation and arbitration the Consultant shall assist the Client in the preparation of the documents needed by the Client.
- Awarded Consultant and its nominated sub-consultants must establish or have a local branch office in North Macedonia for the administrative communication aspects (corresponding letters, etc.) as well as all lawfully required supervision licences as per the Macedonian construction law.

- The Consultant has the right to stop the execution of the works:
 - In case of serious defaults and deviations from the technical specifications for the relevant works for Replacement of Public Lighting System.
 - If the works are not aligned with actual standards and technical regulations or World Bank safeguards and regulations.

Not limited to the above, the specific tasks are described as follows:

Task 1. Carry out supervision of the works for the Sub-projects

It is foreseen that the duration of the assignment will be 8 months, starting from the time of signing the contract and work commencement notice letter with the construction Contractor until completion of the works for the Sub-projects by taking over certificate and the Defect Liability period – DLP. The Client shall notify in written the Consultant for each signed contract with the construction Contractor.

1a) Supervise the works for the Sub-projects

- Oversee and control the works for the Sub-projects and Contract and sign IPC as specified in the Contract. For each phase of the Sub-Projects the Consultant is responsible to submit the report to the Client, Ministry of Finance –PSEEP PIU. This report refers to the performed works for the Sub-projects, with judgment for compliance of the works with the technical specifications, works contract, location conditions, World Bank safeguards, and this TOR.
- To check, verify and sign all necessary documents needed for completing the invoice according to the Macedonian legislative i.e., IPC, measure recording book, construction diary.
- Conduct regular site visits minimum once a week on the construction site, for overseeing the implementation of Sub-projects, as well presence of the appointed staff.
- Prepare monthly progress reports and send a copy of the material acceptance to the Contractor and PIU.
- To check the quality of materials according to the feasibility study, works contract and in accordance with Macedonian laws and regulation for construction.
- To check all certificates and results of tests, performed to prove the quality of materials and equipment.
- To verify the Statements of Accomplished works provided by the Contractor. The Consultant is responsible for signing of all documents that meet the quality and quantity specified in the Bill of Quantities - Working Schedule ("BoQ") in the contract signed between the Contractor and the Municipalities of Lozovo, Rankovce, and Debrca.
- Ensure that all health & safety measures are respected by the Contractor in compliance with the monitoring and reporting requirements of relevant official authorities and as stipulated in detail in the ESMP Checklist, as well as traffic regulation and protection by the contractor.

- To check that the lamps are dismantled carefully and left on a daily basis in the safe storage area, already defined and approved by the municipality.
- Administer the Contract: evaluate schedules; monitor progress of the Contractor on the project; ensure that project deadlines are met; proactively identify the works for Replacement of Public Lighting System and propose solutions; ensure that works for the replacement follow the feasibility studies.
- To monitor the implementation of the mitigation measures as stated in the Environmental and Social Management Plan (ESMP) as per signed agreement between the Municipality of Lozovo, Rankovce, and Debrca and the Contractor, during the works for replacement of the street lighting, and require improved performance where needed. The reports with results of the ESMP monitoring should be submitted to the Ministry of Finance – Project Implementation Unit of the Public Sector Energy Efficiency Project (“PSEEP PIU”) together with the monthly progress reports, including proofs for appropriate actions (e.g. visible protection measures for workers, users and goods of the beneficiaries, electrical waste collection, transportation and disposal records, hazardous materials management data sheets, etc. as stipulated in details in the ESMP Checklist).
- To report any defects and irregularities to the Client and inspector for construction, immediately by a written report and for writing the mentioned defects in construction diary and measure recording book.

1b) Evaluate the completion and implement commissioning of the Sub-projects

- Confirm the Sub-projects are in compliance with the Construction Contract. In case of deviation from the Construction Contract, justification of the differences and evaluation of consequences in terms of compliance with the Feasibility Study shall be reported.
- Before issuing the Certificates of Completion/Taking-over Certificates for each Municipality, the Consultant will enforce any obligation placed on the fields where the works for Replacement of Public Lighting System was conducted, Contractor to remove all obstructions, surplus materials, plant, rubbish, and temporary works.
- Upon completion of the Works, the Consultant will require the Contractor to remove all plant, equipment, and materials.
- The Certificates of Completion/Taking-over Certificates for each Municipality shall be prepared and issued by the Consultant in consultation with the Client, following the successful completion of the works, provided that the Consultant confirmed that any defects or deficiencies have been successfully rectified.
- The Consultant shall confirm that training of beneficiary staff on new lighting equipment has been conducted. The issuance of the Certificates of Completion/Taking-over Certificates shall be subjected to:
 - ✓ The Contractor having provided Examination of electrical installation with preparation of PROTOCOL-ATEST from technical measurements of electric lighting according to the photometric calculation.

- ✓ The Contractor having provided the operating and maintenance manuals¹, training of beneficiary staff on new lighting equipment, as well as all the drawings and documents handed over to the Client requested in the Contract.
- ✓ No major deficiencies are found, and minor deficiencies are listed in the defects list by the Consultant.
- During the Taking-over process, the Consultant shall ensure that the Certificates of Completion/Taking-over Certificate also contains a chapter on Environmental and Social issues, proving that the required measures for the Operational Phase of the street lighting system are available and relevant personnel is trained for the future use and maintenance. Upon submission of this Certificates of Completion/Taking-over Certificates, the Client will conduct an Environmental and Social Post-construction audit visit on the site to check and confirm the findings of the Certificates of Completion/Taking-over Certificates.

1c) Deliverables under Task 1:

1a) Interim monthly progress reports for Works. These reports shall contain detailed information that will describe the physical and financial progress of the works and will address contractual and technical matters. They shall provide information on (tentative list below that can be amended):

- (i) a description of physical progress, with reference to the program (including progress charts and dated photographs in colour giving all information regarding the progress of the Works).
- (ii) explanations for differences between actual and forecast progress and mitigation measures for compensating the differences.
- (iii) major milestones, obstacles, achievements, constraints on progress and problems encountered and appropriate identified solutions.
- (iv) remarks on procedural issues.
- (v) variations and proposals for future variations to the timing and budgets of individual activities.
- (vi) records of human resources, mechanical equipment, and materials, testing and quality control, with copies of the test results and, evaluation of the test results in table or

¹ The following manuals and plans for operational phase are required:

- (a) Evidence List containing information on each replaced light bulb to be handed over by the Contractor. This List shall contain details such as: type of bulb, guaranteed working hours, date of installation and running in the new operation, power and other technical specification, as well as info/plan for monitoring of its performance.
 - Ensuring the energy related certificates for the replaced bulb is appropriately coded in the Evidence List.
- (b) Available Manual for use/maintenance of the replaced light bulbs
 - Ensuring the municipal personnel is informed and trained on the EE measures and use/maintenance measures of the light bulbs
- (c) Plan for monitoring of the energy savings at daily, monthly and annual levels
- (d) Plan for electrical waste management is available for the Municipality and adequate contracts with authorized companies for electrical waste collection, transportation and disposal are in place.

graphical form. Action taken with regard to poor results shall be stated.

- (vii) status of payments and requests for payment:
- (viii) stakeholder issues.
- (ix) a summary of environmental and social issues, reporting the compliance with the ESMP Checklist for Replacement of Public Lighting System in each Municipality, including proofs for appropriate actions (e.g. waste collection, transportation and disposal records, hazardous materials management data sheets, etc. as stipulated in the ESMP Checklist).
- (x) The report shall include the percentages of the Work items completed and planned.
- (xi) The report shall be submitted to the Client by the seventh day of following month. Any comment by the Client on the report shall be reviewed and re-submitted to the Client within a week.

Consultant shall also prepare a report in table form showing summary of cumulative progress in main work activities on monthly basis. The report shall be submitted to the Client in an acceptable format.

Final completion report, to be delivered 2 weeks after completion of the works. In case of comments and remarks to the Final completion report ("FCR"), the Consultant is obligated to deliver new corrected version of the FCR in period of one week after receiving the comments and remarks from the client. The report shall contain at least:

- i) Copies of requests for issuance of a takeover certificate;
- ii) Summary of information contained in the previous monthly reports, such as summary of completed works, completed tests and acceptances of materials, and works as well as completed control testing,
- iii) An overall review of the project, as well as complete financial summary of the contract.
- iv) A report on problems encountered and how they were overcome.
- v) Copy of the complete documentation prepared during the construction period (Annex).
- vi) Copy of the complete correspondence between the Contractor/Consultant/Client/Final Beneficiary and vice versa.
- vii) Recommendations for maintenance works.
- viii) Quality assessment of materials and workmanship.
- ix) Data on the technical difficulties encountered and how they were solved.
- x) Report on the compliance with ESMPs, any issues/complaints and how they were overcome.
- (i) List of Instructions for Use and Maintenance for all replaced street lights approved by supervisor, as listed in the ESMP Checklist – Operational phase,
- xi) Final Report on Contractor's ESHS performance (Code of conduct, compliance with ESMP, consent/permits and other relevant project requirements).

- **Final inspection report.** The final inspection report as part of the FCR, shall address the status of the work items at the time of Certificates of Completion/Taking-over Certificates by the Client, and shall be submitted 2 weeks after taking over for each Municipality where the works for replacement of the street lighting was conducted, as agreed with the Client. The minor outstanding works, defects, failures, shortcomings are to be listed and compiled. Possible remedial actions by the Contractor as needed, are to be listed and noted, including the given period of time the Contractor is to rectify. The material handed over by the Contractor to the Client will be checked and listed for status and completeness.

Other reports upon request. The PIU may request the Consultant to submit specific reports on the issues related to the execution of the works. The Consultant will make the requested report in such manner within a reasonable time.

Task 2: Supervise remedial works to rectify defects that arise during the Defects Liability Period

The Defects Liability Period (“DLP”) is 12 months, starting on the date of Certificates of Completion/Taking-over Certificates for each Municipality.

- The Consultant shall continue to be responsible for the supervision and inspection of the replacement and completion of the Works during the DLP as defined in the Works Contract. The level of supervision shall be appropriate to the scale of the works being carried out. These inspections and supervision are to ensure that works, agreed to be carried out during the DLP, are properly carried out and have been completed and that any failure of any part of the Works has been rectified. If any defect is discovered, during this period, the Consultant shall promptly investigate the reason for it, report to the Client and take required actions to rectify the defect. A report of these inspections shall be submitted to the Client, which shall include all details of any defects, faults, accidents, or breakdowns, which have occurred together with the estimated costs of repair and the time scales within which they will be completed.
- Preparation and submission operating and maintenance manuals for all items of lighting equipment incorporated in or associated with the works, shall be reviewed, and approved by the Consultant in timely manner. Operating and maintenance manuals should be obtained from the Contractor during the issuing of Certificates of Completion/Taking-over Certificates for each Municipality. Otherwise, the Client might ask the Consultant for the conversion of the approved operating and maintenance manuals if Client considers that the Consultant is not strictly following up the work.

Deliverables under Task 2:

- **DLP quarterly reports.** A report of the DLP inspections shall be submitted to the Client, which shall include all details of any defects, faults, accidents, or breakdowns, which have occurred together with the estimated costs of repair and the time scales within which they will be completed. The reports shall be prepared on a quarterly basis.
- **DLP final report** shall be submitted by the time of the expiration of the DLP giving full details of all works carried out during the period if any. This report shall be submitted by the Consultant to the Client 7 days after expiration the DLP for the completed Works.

Task 3: Measurement and Reporting on Performance Indicators

The Consultant shall establish a system and monitor the following performance indicators as stipulated in the overall Project Appraisal Document under which the Ministry of Finance- PSEEP PIU is required to report to the World Bank:

- (i) **Percentage of female staff hired and engaged by the Consultant for this ToR.** For this performance indicator, the Consultant shall establish evidence list from the start date of his works and report in the Interim Monthly Reports on the actual status of male and female staff hired/engaged on various project activities.
- (ii) **User Committee members satisfied with the reconstruction consultation process.** For this performance indicator, the Consultant shall inform the User Committee members monthly about the progress of works and any important issues for the Users or in case of urgent issues, as needed. The Consultant shall establish evidence lists for this consultation process from the start date of his works and report in the Interim Monthly Reports on the actual status of participation and issues discussed.

IV. Deliverables and Payment Schedule

Deliverables:

The Consultant will deliver monthly progress report. In this report, all works conducted by contractors including the progress of the works for each Municipality will be detailly described, including chapter on ESMP implementation. The report will be delivered to the client not later than 7th day of the month for each previous month.

The reports will be delivered to the client in Macedonian language. All deliverables must be submitted as Hard Copy (1 copy signed and stamped) and 1 electronic copy.

The Client will approve the report or give comments in timely manner. If there are some comments from the Client, the consultant must make modification to the report according to the remarks in 5 working days. Approved monthly report will be base for the invoice and payment.

The deliverables for each task will be submitted to and approved by the PIU. The Consultant must obtain approval for each deliverable before moving to subsequent tasks. The table below summarizes the deliverables and includes an indicative timeline and payment schedule.

Task	Deliverable		Reporting period (months after contract signing)	Deadline for submission of deliverable	Payment (% of total payment)
1	1a	1 st Interim Monthly Progress Report for works contract Together with the submission of the interim monthly payment	Month 1	7 th Day of the next month	12.5%

		certificate.			
1	1a	2 nd Interim Monthly Progress Report for works contract Together with the submission of the interim monthly payment certificate.	Month 2	7 th Day of the next month	12.5%
1	1a	3 rd Interim Monthly Progress Report for works contract Together with the submission of the interim monthly payment certificate.	Month 3	7 th Day of the next month	12.5%
1	1a	4 th Interim Monthly Progress Report for works contract Together with the submission of the interim monthly payment certificate.	Month 4	7 th Day of the next month	12.5%
1	1a	5 th Interim Monthly Progress Report for works contract Together with the submission of the interim monthly payment certificate.	Month 5	7 th Day of the next month	12.5%
	1a	6 th Interim Monthly Progress Report for works contract Together with the submission of the interim monthly payment certificate.	Month 6	7 th Day of the next month	12.5%
	1a	7 th Interim Monthly Progress Report for works contract Together with the submission of the interim monthly payment certificate.	Month 7	7 th Day of the next month	12.5%

1	1b	<p>Final completion report; (including calculations, drawings, specifications, test reports, confirmation that the replacement of street lighting demonstrate energy cost savings and social co-benefits in each Municipality, including lifetime energy savings and final cost analysis);</p> <p>Other reports as requested related to the completion of the works (Taking-Over stage)</p>	Month 8	2 weeks after taking over for each Municipality, as agreed with the Client.	12.5%
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V. Timeline

The Services to be provided by the Consultant are expected to start in at the end of 2023, shall cover a period of 8 months duration of the civil works and additional 12 months for Defects Liability Period (DLP) upon completion of the civil works for each Replacement of street lighting in each Municipality.

The works contracts the Sub-projects should be implemented in various period of time. Therefore, the Consultant should plan its activities and provide capacities in accordance with the above stipulated facts and activities in each phase of the implementation of the Consultancy Contract.

During the supervision period, it should be noted by the Consultant that any schedule, report, specification and other document submitted to the Client for approval will be reviewed by the Client and approved or returned for revision and/or resubmission in 15 calendar days.

The Consultant shall submit all the documents in a timely manner to complete the services on time without any delay. Time schedule for the completion of the consultants’ services for the various parts of the work as mentioned below shall be submitted to the Client.

During the execution of the Services, the Client and the Consultant shall review the Work Plan and Staffing Schedule of the Consultant for every month. If required, Consultant shall update them requesting the official approval of Client.

VI. Variations In Scope

The commencement dates of the works for Replacement of Public Lighting System in each Municipality will vary due to different procurement schedule and different works schedule of the

Contractor. The Consultant shall wait for the finalization of the tender evaluation or other issues to be concluded in order to start up the civil works and shall not request any payment or compensation.

If the relevant Construction Contract is not tendered or is not awarded by the Client, the Client may decide:

- to cancel the remaining services of the Consultant. The remaining payments will not be made to the Consultants and the Consultant shall not request any payment or compensation for the cancelled parts of the Services.
- to suspend the remaining services until the awarding of Works Contract. In such case the Consultant shall not be paid by the Client during the period between suspension and startup date of the Construction Contract, and the Consultants shall not request any payment for compensation for the duration mentioned above.
- In relation to the ongoing stages of the Consultant Services, the submission requirements for deliverables above should be allowed by the Consultant as a guideline for the extent and type of documentation that will be required by the Client during the performance of the Services. However, the Consultant shall allow in its fee for the submission of all reports, drawings, documents, etc. either specifically requested in these Terms of Reference or those which may be implied therefrom and the Contractors' contracts. The Client may however vary such requirements while the Services to be performed.
- Upon the completion of Works, the Consultants shall submit all the original copies of correspondences, documents, test results, drawings etc., relating to the Services and Works, to the Client together with indices in acceptable files and forms by the Client.

VII. Support to be provided by the Client to the Consultant

- The PIU staff from the Client will work closely with the Consultant and will provide technical assistance during the implementation period if needed.

VI. Consultant Qualifications

Qualification of the consultant company

The Consultant Company should possess the following qualifications:

1. Professional capacity of the Consultant

- The Legal entity must possess valid Company License B for supervision issued by the Ministry of Transport and Communication of the Republic of North Macedonia / in case of JV, - at least one of the members in the JV must obtain valid Company license B for supervision issued by the Ministry of Transport and Communication of the Republic of North Macedonia.
- Required standards:
 - ISO 9001: 2018

- ISO 14001: 2015
 - ISO 45001:2015
2. At least 20 permanent staff working for the Consultant, confirmed by official institution in RNM.

General and Specific experience of the Consultant

2.1. General Experience of the Consultant

The Consultant Company must prove its capability and adequacy for supervision of construction works in the last 5 (five) years from submission deadline, by submission of reference list.

2.2 Specific experience of the Consultant

The Consultant Company must prove its capability and adequacy for supervision of works with detailed referent list of at least three (3) conducted similar supervisions of works for reconstruction/construction/ replacement of public lighting systems in the last 5 years.

Consultants may associate with other firms in the form of a joint venture or a sub-consultancy to enhance their qualifications. The “association” may take the form of a Joint Venture or a sub-consultancy. In case of a Joint Venture (JV), all members of the JV will be evaluated jointly for the purpose of short listing and shall be jointly and severally liable for the assignment and shall sign the contract in case of award is made to that JV group. Interested consultants should clearly indicate the structure of their “association” and the duties of the partners and sub consultants in their application. Unclear expression of interests in terms of “in association with” and/or “in affiliation with” and etc. may not be considered for short listing. Keeping one expression of interest per firm as principle, a consultant firm may decide whether it wishes to participate as a sub consultant or as an individual consultant or as a partner in a joint venture. Please note that a firm shall submit only one expression of interest in the same selection process either individually as a consultant or as a partner in a joint venture. No firm can be a sub consultant while submitting an expression of interests individually or as a partner of a joint venture in the same selection process. A firm, if acting in the capacity of sub consultant in any consultant or JV, may participate in more than one consultant, but only in the capacity of a sub consultant.

Note: The Consultant Company may associate with other Consultant Company (s) in the form of a joint venture or of a sub-consultancy to complement their respective areas of expertise, strengthen the technical responsiveness of their proposal.

3. Qualification of the Supervisor Team of Key experts

The Consultant shall have the organizational capacity (it is expected that the Consultant shall have at least below listed key experts for performing activities under this assignment) and available appropriate skills among staff. The consulting team assembled to implement the project should be composed of experts with strong knowledge as per the below requirements.

3.1. Project Manager

The minimum necessary qualification for the Project Manager:

- University degree in Civil /Mechanical or Electric Engineering Valid Authorization B for supervision issued by the Chamber of Certified Architects and certified Engineers of North Macedonia
- At least 10 years working experience as supervisor.
- Proven experience for supervision in infrastructural engineering projects, especially supervision of reconstruction/construction/replacement of public lighting systems of at least three (3) conducted similar supervisions within last 5 years.
- Knowledge of the Macedonian legislation, standards and technical regulations for construction.

3.2. Electrical engineer

Number of required Key experts as Electrical Engineers is 2 (two).

The minimum necessary qualification for the Electrical Engineers:

- University degree in electrotechnical engineering.
- Valid Authorization B for supervision issued by the Chamber of Certified Architects and certified Engineers of North Macedonia.
- At least 5 years working experience as supervisor.
- Proven experience for supervision of reconstruction/construction/replacement of public lighting systems of at least three (3) conducted similar supervisions within last 5 years.
- Knowledge of the Macedonian legislation, standards and technical regulations for construction.

3.3. Environmental Expert

- University degree in relevant science, such as: biology, chemistry, technology & engineering, environmental protection, geography, Environmental Sciences, Environmental Engineering, Environmental Policy, or a related field.
- Valid Certificate for Environmental Impact Assessment examination, issued by a relevant National Authority.
- Previous experience in Environmental Impact Assessment studies/reports, or Environmental Management Plans (Mitigation and Monitoring Plans with site-specific measures) or supervision for minimum 1 reconstruction/construction/street lighting energy efficiency project funded by international finance institutions, preferably World Bank, EBRD, EU IPA, etc.

3.4. Social Expert

- University degree in social sciences and similar.
- Previous experience in Social Assessment studies/reports/elaborates for minimum 5 energy efficiency projects.

- Previous experience in Social Impact Assessment studies/reports or Social Management Plans (Mitigation and Monitoring Plans with specific measures) for construction projects funded by international finance institutions, preferably World Bank, EBRD, EU IPA, etc.
- Proven successful experience in collaboration with government institutions including local self-government (municipalities).

The Project Manager shall be responsible for overall Supervisor process, communication, reporting and quality control.

VII. Implementation arrangement

The Consultant will report directly to the Client Coordinator and the Ministry of finance – PSEEP PIU. If any disagreement occurs between the Consultant and the Client, during the performance of the Consultant Services, the decision from the Client Coordinator and the Ministry of finance – PSEEP PIU will be binding. During the period for implementation of the Sub-projects, the consulting company will be responsible for the project implementation, especially to oversee and to inspect all qualitative, normative, and quantitative aspects of the project in accordance with the technical specification and Activity Schedule for the relevant works. Also, the consultant is responsible to verify the measure recording book/s, the construction diary, and the interim monthly reports, prepared by Contractor and to report to the representative of the MOF-PSEEP PIU for any defects and possible works which are in disrespect with actual standards and technical regulations for construction.