



Lao People's Democratic Republic
Peace Independence Democracy Unity Prosperity

Ministry of Public Works and Transport
Department of Roads

Ref No. 07463/DoR.
Vientiane Capital, date 20 Mar 2023

REQUEST FOR EXPRESSIONS OF INTEREST
(Implementation Support and Work Supervision Consultant Services – Qualification and Cost Based Selection)

Country: *Lao People's Democratic Republic*

Client: *Department of Roads, Ministry of Public Works and Transport*

Name of Project: *Improvement of National Road 13 South Extension, Km 21- Km 71*

Loan No.: *AIIB Loan*

Assignment Title: *Consulting Service Firm for Implementation Support and Work Supervision Consultant*

Reference No: *005-DOR / QCBS-001.*

The Ministry of Public Works and Transport, Lao P.D.R hereinafter called “Recipient”) intends to apply for financing support from the Asian Infrastructure Investment Bank (AIIB) toward the cost of Improvement NR13SE (km 21-71) Project and intends to apply part of the proceeds for consulting services.

The Department of Roads, Ministry of Public Works and Transport intends to apply part of the financing from the Asian Infrastructure Investment Bank (AIIB or the Bank) toward the cost of the Improvement of National Road 13 South Extension, Km 21- Km 71 and intends to apply part of the proceeds financing for consulting services on the Implementation Support and Work Supervision Consultant (ISWS).

The consulting services (“the Services”) include Consultancy Services for Implementation Support and Work Supervision Consultant for supporting the Employer in ensuring that the OPBRC contract is implemented fully in line with the contractual clauses and requirements, including the technical, performance and quality requirements listed in the Specifications with a total 408 man-months of which (198 man-months for key personnel and 210 man-months for non-key personnel), the implementation period, expected to start on the date 08 January 2024.

The detailed Terms of Reference (TOR) for the assignment can be found at the following website <http://www.mpwt.gov.la>, AIIB Website and UNDB or can be obtained at the address given below.

The Department of Roads, Ministry of Public Works and Transport now invites eligible consulting firms (“Consultants”) to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services.

The shortlisting criteria are:

Criterion 1 - Supervision of road works and road maintenance: Having at least ten (10) years of experience in Works Supervision of national road improvement or rehabilitation contracts of equivalent or comparable value, scope of nature and at least five (5) years in Supervision of road maintenance; such experience in South/ South East Asia is a strong asset;

Criterion 2 - Type of road works and services: Having completed successfully at least one supervision/monitoring contract or equivalent of comparable value, scope and nature under OPBRC, OPRC, DBMOT with performance-based maintenance arrangements, successfully completed in the capacity of prime supervision or monitoring consultant (i.e. individually or as lead member of JV) in the past 10 years

Criterion 3: - Survey and planning in road works and services: Having completed successfully at least 3 road works supervision contracts of similar scope and nature performed in the past 10 years which included implementation and/or monitoring of RP, ESIA, ESMP for road construction, rehabilitation, or maintenance.

The Qualifications and Experience of Key Experts shall not be included in the shortlisting criteria. Key Experts will not be evaluated at the shortlisting stage.

The attention of interested Consultants is drawn to Section II, paragraph 4.4, 4.4.2 and 4.4.3 of the AIIB’s “Procurement Instructions for Recipients” June 2, 2016 (“PIR”), setting forth the AIIB’s policy on conflict of interest.

Consultants may associate with other firms to enhance their qualifications, but should indicate clearly whether the association is in the form of a joint venture and/or a sub-consultancy. In the case of a joint venture, all the partners in the joint venture shall be jointly and severally liable for the entire contract, if selected.

A Consultant will be selected in accordance with the Qualification and Cost Based Selection (QCBS) method set out in PIR.

Further information can be obtained at the address below during office hours Monday to Friday at 8:00 to 12:00 and 13:00 to 16:00 (Vientiane Capital, Lao PDR time). Department of Roads, Ministry of Public Works and Transport, Lanexang Avenue, Vientiane Capital, Lao PDR.

Expressions of interest must be delivered in a written form to the address below Department of Roads, Ministry of Public Works and Transport, Lanexang Avenue, Vientiane Capital,

Lao PDR. Second floor Department of Road's Meeting Room or by email to:
k_litta@yahoo.com by 24 April 2023, at or before 16:00 PM (Vientiane Capital, Lao PDR
time)

Cc: ssoutannouvong@yahoo.com; panidaboupha@yahoo.com *LLL*



Sincerely yours,

Litta KHATTIYA,
Director General,
Department of Roads, Ministry of Public Works and Transport,
Head of Procurement Committee.
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Terms of Reference

Climate Resilience Improvement NR13SE (km 21-71) Project (P000618)

Implementation Support and Monitoring Consultant Services for Output- and Performance-based Road Contract (MC-OPBRC)

A. Project Background

National Road 13 is the most important highway in Lao PDR, connecting Laos with China in the North and Cambodia in the South, for a total length of 1,500 km.

The Government of Lao PDR (GOL) has requested the assistance of the AIIB for the Improvement and Maintenance of National Road 13 between km 21 at the outskirts of Vientiane Capital and km71, where the section ties into the NR13S currently being upgraded.

The Project is expected to deliver a high Economic Internal Rate of Return, mainly due to reduced vehicle operating costs and travel times. GoL intends to implement the Project as an Output- and Performance-Based Road Contract (OPBRC), with a 10-year contract duration. AIIB is expected to finance the cost of the OPBRC and the Monitoring Consultant (MC) contract for the first five years, during which the rehabilitation and upgrading of the road will be carried out in parallel with the road maintenance services. The costs during the remaining contract period shall be funded from the resources of the Government of Lao PR, both for the OPBRC and the Monitoring Consultant contract.

An OPBRC approach in line with the one adopted for NR13 North and NR13S is envisaged for the Project. OPBRC expands the role of the private sector from the simple execution of works to the management and maintenance of road assets. The contractor is paid through a combination of lumpsum-based output payments for defined rehabilitation and improvement works, along with periodic performance-based lump-sum payments for maintenance services.

The OPBRC contracting modality differs very substantially from traditional civil works contracts. As a consequence, the task of the OPBRC Monitoring Consultant also differs substantially from the typical tasks and responsibilities of the “Engineer” under traditional civil works contracts (FIDIC Red Book type). This results from the quality assurance arrangements under OPBRC contracts, under which there is a self-control mechanism of the contractor, with the Monitoring Consultant verifying the contractor’s compliance with quality requirements stated in the OPBRC contract and Specifications.

The Ministry of Public Works and Transport (MPWT) is planning to award one 10-year OPBRC contract covering (i) rehabilitation and improvement works designed to make the road more climate resilient and (ii) Maintenance Services commencing from the start of the contract and continuing for a total of 10 years. The payments for the rehabilitation and improvement works will be made if the contractor meets or exceeds the performance indicators for pre-defined fully finished road sections (“milestones”). Achievement by the contractor of the requirements is to be verified by the Monitoring Consultant who shall then recommend payments to be employer if all requirements are fulfilled.

Payments for maintenance services will start after the contractor has mobilized on site and has started those services. Payments are linked to the achievement of the required service levels. Payment reductions are applied if not all service level criteria are fulfilled

The Department of Roads (DoR), under MPWT is responsible for project implementation including overall technical oversight, execution and management of the project. DoR, which will be the Employer for the OPBRC, has appointed a dedicated team (Project Management Unit - PMU) that will be responsible for the day to-day implementation, and operation of the project, including contracting and supervision of all consultants. After the completion of the rehabilitation and improvement works, the Project Management Unit will transfer the road to the Road Administration Division (RAD) under DoR.

This assignment (the “Assignment”), as outlined in these Terms of Reference (“TOR”), covers the Monitoring Consultant services during the first 4 (four) years of the OPBRC.

An Environmental and Social Management Framework (ESMF), which includes a Pre-ESIA and Labor Management Plan (LMP), as well as a Resettlement Framework (RF), Ethnic Groups Engagement Framework (EGEF) and Stakeholder Engagement Plan (SEP), were prepared by MPWT in 2019 and updated in 2022. These documents offer guidance on potential environmental and social risks and impacts and define the mandatory mitigation measures to be applied under the OPBRC contract.

Furthermore, a Feasibility Study (FS) was conducted in 2018, and its update is currently underway. It includes the conceptual design and the full ESIA. The Study will deliver the IEE required under national legislation, and the full ESIA including the ESMP and the relevant sub-plans (LMP, EGEP, BMP, etc..).

E&S Requirements: To avoid and mitigate the potential negative impacts of the works during construction and maintenance services in line with AIIB’s Environmental and Social Policies, a consulting firm was mobilized in 2022 to conduct surveys and update the conceptual engineering design as well as update detailed E&S documents version 2019 as required by the AIIB. The PMU assisted by the monitoring consultant will be responsible for the review and approval of the C-ESMP prepared by the contractor and ensuring its effective implementation. The Project activities also have to be conducted according to GOL laws and regulations especially those related to environment and social standards. Consultation with GOL suggested that to comply with GOL’s EIA regulation, the Project will require an Environmental Compliance Certificate (ECC) for each Province and thus preparation of **2** Initial Environmental Examination (IEE) reports will be required. **The Consultant will be required to prepare the 2 IEE reports including consultations.** The Environmental Research and Disaster Prevention Division of the Public Works and Transport Institute (EDPD/PTI) will facilitate the issuance of the ECCs as well as an Ethnic Group Engagement Plan (EGEP). EDPD/PTI will also be responsible for the overall guidance, supervision, and coordination of the ESS activities of the Project including provision of training on ESS policies of the AIIB as well as road safety.

B. Objectives of the Assignment

The objective of the Assignment is to support the Employer in ensuring that the OPBRC contract is implemented fully in line with the contractual clauses and requirements, including the technical, performance and quality requirements listed in the Specifications. The services include but are not limited to:

- a) review and recommendations on the approval of the detailed designs prepared by the Contractors under OPBRC;

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- b) monitoring the contractor’s compliance with the requirements described in the technical and performance specifications of the rehabilitation and improvement works on the NR13SE Project Road;
 - c) monitoring the contractor’s compliance with the Quality Assurance Plan
 - d) monitoring the contractor’s compliance with performance indicators for the maintenance services
 - e) advising the Employer on all facets of OPBRC contract implementation;
 - f) review and recommend approval of the Contractor’s Site-Specific Environment and Social Management Plans (SS-ESMPs) for each contract and location, as well as the site specific traffic safety management plan;
 - g) engage external services from a certified laboratory for environmental instrumental monitoring of air quality, noise and water quality, if and when required. The Services shall be carried out in compliance with best international practices.

C. Scope of the Assignment

The Consultant shall be responsible for the monitoring of the Contractor’s performance and shall provide implementation support to DoR/MPWT and EDPD/PTI during the implementation of the Project (NR13SE) including ensuring full compliance with the ESS measures as required by the AIIB and GOL and the preparation of the required reporting on these. The tasks include, but not limited to, the following:

- i) Review and recommend for approval of the detailed designs as well as the C-ESMP, traffic management plan and all other documents to be prepared and submitted by the contractors for the OPBRC contracts, (including any adjustments, compliance with design standards and international best-practice appropriate to Lao conditions in terms of climate resilience, recommendations on road safety from road safety audits, E&SESS measures especially those related to occupation health and safety of workers and local communities, etc.) in line with the conceptual designs and the E&S documents approved by AIIB and GOL;
- ii) Monitor rehabilitation, improvement and emergency works, and report on progress, compliance with the requirement of technical specifications of the works and quality control, as well as ensuring compliance with C-ESMP and other ESS requirements during construction works and maintenance services under the OPBRC on NR13SE;
- iii) Monitor the contractor’s compliance with the required service levels of maintenance services throughout the duration of the Monitoring Consultant contract, including providing advice to MPWT on technical issues, contract management, and safeguards activities;
- iv) Assist DoR/MPWT and EDPD/PTI in implementing and report on any leftover tasks of RP implementation and also addressing any additional resettlement impacts including relocation of public utilities caused by the detailed design;
- v) Monitor, supervision and report on the implementation of mitigation measures to reduce potential negative impacts on local environment and local people during construction and maintenance services as required by the AIIB and GOL, including review, recommendation for approval, and monitoring of the C-ESMP to be prepared and implemented by the Contractor. Special consideration must be given to ensure effective implementation of the ESHS measures to prevent and address occupational and community health and safety issues of workers, Labor Management Plan (LMP) and local communities and compliance with the Code of Conduct (COC) related to SEA, GBV, VAC, LMP and the campaigns related to HIV/AIDS awareness and road safety;
- vi) Other tasks as necessary in the project implementation.

The above tasks are further detailed under Part E.

The civil works required under the OPBRC contract for the Project Road comprise the improvement of the quality, climate resilience, maintenance and safety of NR13SE. The section of NR13SE starts in the suburb area of Vientiane Capital with the starting point at Ban Khosivilay located about 21 Km North West from the Capital City. Works and maintenance services will be carried out under the Output- and Performance-based Road Contract (OPBRC) contracting modality and shall incorporate the conceptual design for this road section as prepared (and updated) by DoR.

It is envisaged that the works to be carried out under the OPBRC shall lead to an upgrading of the existing project road to ASEAN Highway Standard Class I and Class II in level terrain. The first 20 km (from km 21 to km 41) of the project road will also be widened to an urban road standard, with a divided 4-lane carriageway, a roadway width of 23 meters: four traffic lanes of 3.50m, two shoulders of 1.70m, two sidewalks of 1.50m, and a central median of 2.60 m (included safety space).

The remaining 30-km section of the project road (from km 41 to km 71) the road is designed as a 2-lane 2-way undivided road, with a roadway width of 12 to 15 meters, two traffic lanes of 3.50, two shoulders of 2.50m, and two sidewalks of 1.5 m in community areas only. The works will include the rehabilitation of the existing carriageway, construction of crossings, upgrading to climate resilient standard, improvement and construction of side drains and slope protection works, and installation of road safety furniture.

During project implementation, the Consultant shall carry out all activities in accordance with relevant project documentation, MPWT regulations and Lao legislation, including those related to ESS measures. The latter shall be carried out in line with AIIB policies and the Consultant shall mobilize enough staff and other resources for ensuring the detailed monitoring and reporting. The applicable IFI's policies shall be part of the Specifications and particular conditions of the Contracts signed under this Project.

The consultant is encouraged to hire women to be part of its consulting services.

D. Detailed Tasks

Task 1: Review of the Detailed Design (RDD)

The Consultant shall review/recommend for approval, within 14 days of receipt, the Contractor's work plan for the design activities, with scheduled dates for each development stage of the detailed design. The suitable stages listed below are to be considered.

The Consultant shall review the detailed design prepared by the Contractor, according to the approved work plan. The detailed design may be prepared and approved for individual sub-sections of the road.

The design process itself can be done and reviewed in stages. At the suitable design stages listed further below, systematic reviews of the detailed design and the ESS requirements shall be performed in accordance with planned arrangements:

- i) To assess and certify the accomplishment of the final design work plan and its adequacy to ensure that the design meet minimum requirement;
- ii) To evaluate the expected results of the design to meet the contractual requirements;
- iii) To evaluate the capability of the existing resources as well as of the results obtained; and
- iv) To identify any problems and propose necessary actions in a timely manner, especially those related to technical, safety and other key ESS measures.

Suitable stages are:

- Program for data gathering, taking into consideration existing data from the Conceptual Design (CD)
- Interpretation of the data collected. Selection of design parameters and obtaining approval from the DOR/MPWT
- Incorporation of the design parameters into the design process;
- Design and analyses methods, including design calculations, topographic surveys and geotechnical surveys / testing of the existing pavement structures, bridges, culverts and other structures;
- Adequacy of the designed solutions (e.g. geometric design; drainage; earthworks; pavement; road safety furniture; traffic signs and pavement marking; structure repair; environmental protection measures);
- Ensure that the designs include climate resilience measures, thus, hydrology data for hydraulic designs must take into account future climate parameters to modify historic data. The improved road shall withstand extreme weather events, designed in line with international best-practice appropriate to Lao conditions, the ESS requirements, the vulnerability data provided by MPWT, and that the design fits with the objectives set out in the road design while also minimizing land requirements or adverse impacts on accessing private properties;
- Advise on modifications where necessary and submit for DOR/MPWT approval as appropriate;
- Review traffic management plans to ensure minimum delays, to avoid situations where contractors block the roads unnecessary for too long.
- Prepare Quality Assurance Plan and Manual for safe and value for money implementation

Participants in such reviews shall include representatives of functions concerned with the design and development stage(s) being reviewed. Records of the results of the reviews and any necessary actions shall be maintained.

Task 2: Data Collection

The Consultant shall carry out the following tasks upon mobilization:

- i) Collect and review all available technical documentation related to the Project Road (e.g. digitized topographic maps, as-built drawings, elevation and cross-sections, landslide and seismic data, hydrographic data, climate change hydrology data, climate vulnerability and risk data, input data and results of HDM-4 evaluations, previous studies);
- ii) Review the Road Safety Audit report (RSA), which will be conducted by another consulting firm hired by MPWT. The Monitoring Consultant needs to ensure that the recommendations from the road safety audit report will be incorporated into the detailed design to be prepared by the contractor.
- iii) Make videos of the entire Right of Way prior to commencement of construction works and then at intervals not exceeding 3 months throughout the road rehabilitation and improvement works, and at 6-months intervals thereafter, until the end of the MC assignment. These videos shall be geographically coded and provided with software to enable remote viewing. Suggested format is MP4 or equivalent, and videos should be taken by construction milestones (expected to be 3-5 km). Relevant data should be provided to DoR in a format that allows for easy input into the Road Maintenance System (RMS).
- iv) As an alternative to video, geocoded photos at no greater than 20m intervals may be collected and loaded into Mapillary (www.mapillary.com) or equivalent for keeping a timeline of photos.

Task 3: Daily Monitoring of rehabilitation works and maintenance services

The Consultant will set up a suitable organization to monitor that the works are completed in accordance with the contractual requirements and will mobilize sufficient staffing for this task. The Consultant shall arrange a schedule of management meetings, site inspections and other jobs conference in liaison with the Contractors and notify those expected to attend. The Consultant shall take notes and circulate minutes thereof.

The Consultant shall:

- (a) Maintain orderly files for correspondence, reports of site visits and meetings, material submissions, reproduction of the original contracts and all addenda, eventual emergency works, as well as the Consultants' clarifications and interpretations of the contract documents, progress reports and other related documents;
- (b) Keep a diary or log book, recording the Contractor's works main achievements, contractors quality control activities and their outcomes, observation by the MC of quality testing carried out by the contractor, the detailed description of the MC's own testing and quality verification carried out, data related to questions and clarifications, list of visiting officials, daily activities, decisions, observations in general, and specific observations in more detail, such as actual climate (weather) conditions (rainfall); and
- (c) maintain a set of drawings, "as built drawings," recording details of the works and maintenance services actually executed. On E&S, the Consultant shall keep all related information and documents as approved by AIIB and GOL, especially those related to the policy instruments (ESMF, RPF, EGEF, SEP); E&S plans (E&S management plans in bidding and contract documents, ESMPs, C-ESMPs, ARPs/RPs, EGEP); and the implementation results/issues including E&S monitoring and tracking of complaints and/or accidents (if any) and follow-up actions on the GRM process and E&S monitoring reports.

Specifically, the Consultant will be required to perform *inter alia* the following tasks:

- i) Assist DoR/MPWT to administer the execution of the rehabilitation and improvement works in accordance with the OPBRC; verify the correctness of the certificates of payments as required by the contract; enter and maintain complete records of all payments made to the contractor. The Team Leader of the Consultant will be the Project Manager's representative;
- ii) Provide such information as is necessary for the Contractor to set out the works; and check that the setting out is correct;
- iii) Review and recommend for approval of the Contractor's work program and proposals, method statements, calculation notes if any, working drawings, specifications, maintenance method or technology, proposed materials and their compliance to the specifications and the designs, traffic management plans, contingency plan, etc. to the extent required by the contracts;
- iv) Oversee and monitor the Contractor's activities of rehabilitation, improvement and emergency works, and maintenance services to verify compliance with the provisions of the contract and the specifications, noting that the primary responsibility for supervision and quality control is with the Contractor's own engineering team and the contractor's Quality Assurance team;
- v) Ensure that the payment mechanism's described in the contract are followed, including the Monitoring Consultant's recommendation (or not) for payment, and provide the relevant certificates;
- vi) Make recommendations to DoR/MPWT on any claims by the Contractor's (in the case of emergency works, for example) based on the Contractor's requests which must be substantiated with detailed information;
- vii) Apply payment reductions for non-compliances with required services levels, and

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- liquidated damages for delays, in accordance with the OPBRC contract clauses and specifications;
- viii) In the event of changes to the works being required (in case of emergency works, for example), review the necessary documents prepared by the Contractor, consult with the Contractor and submit to DoR/MPWT with recommendation for approval or rejection, all in line with the OPBRC contract clauses and specifications;
 - ix) Monitor the operations (including maintenance of the road under contract to ensure traffic flow safety and safety of workers and local communities) and works activities in the field of the Contractor to ensure quality of workmanship and compliance with the contracts;
 - x) Participate in and/or review as needed and appropriate the road tests carried out by the contractor in the field and in the laboratory which will be provided and operated by the Contractor; analyze and endorse the results or propose the appropriate procedures for re-testing and / or correction measures, alternatively, arrange for the tests required for the traditional works contracts with the cost bear to contractor;
 - xi) Verify that all works comply with quality requirements and recommend payment only for those works that are fully compliant with quality requirements;
 - xii) Maintain detailed daily diaries, photographs and other documents concerning relevant events and activities; and call and keep minutes of routine site meetings between the parties to the contracts; review conformity reports prepared by the Contractor or arrange required inspections for acceptance, and report to DoR/MPWT. Propose any rectification work or solution where required for implementation and check that it is implemented with contractor bearing the cost;
 - xiii) Prepare brief monthly and consolidated quarterly progress reports for the civil works under the contracts in a form acceptable to DoR/MPWT and the AIIB. These reports will include, as a minimum, details of the physical and financial status of the contract, details of delays and the budgetary effect of particular problems, with suggested solutions and comments on the quality of works in accordance with the contracts, a summary of key challenges and achievements of the implementation of C-ESMPs and other E&S plans as appropriate and suggested mitigation measures.;
 - xiv) Work with PTI under MPWT (and contractor) to ensure ESF compliance, supervise and report the ESF implementation on monthly (technically brief) and on quarterly basis (full assessment of ESF aspects) and timely report any incidents of accidents.
 - xv) Carry out and propose for final inspections of the works in close cooperation with DoR/MPWT and advise DoR/MPWT on the issuance the taking-over and/or the completion certificate;
 - xvi) Review for accuracy the ‘As-Built’ drawings prepared by the Contractor for all the works, and convert the ‘As-Built’ information to a suitable form for input into the RMS. This includes, where appropriate, documents of a scale and layout suitable for scanning and consolidation into computer graphics data base for later use by DoR/MPWT for planning, programming and maintenance of the road system;
 - xvii) Prepare a Completion Report covering all rehabilitation and improvement works carried out under the OPBRC. The report will also include a section on the progress, issues, and follow-up actions related to safety and other E&S requirements;
 - xviii) Recommend and report to DoR/MPWT with respect to carrying out the works following any possible appeal to conflict resolution, arbitration or litigation related to the works and/or E&S, Road Safety Audit and resettlement the issues and follow-up actions; and
 - xix) Provide any other specialized services as may be necessary and agreed upon with DoR/MPWT, and any other services as may be requested by DoR/MPWT;
 - xx) Monitor the Contractors’ health and safety plan implementation, precautions on the sites and safety training of their staff and laborers;
 - xxi) In close coordination with EDPD/PTI, DOR, and DOT, assist DPWTs in the project provinces to plan and implement E&S measures in line with the AIIB and GOL requirements. This will include, but not limited to, providing guidance to the Contractor
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on ways to actively engage local authorities and local communities.

Task 4: Review of the Contractor’s Programs of Works

The Consultant shall review the Contractor’s Program of Works, including but not limited to:

- i) Review the Program of Works submitted by the Contractor for the execution of the works to determine whether the methods, arrangements, order and timing of activities are realistic, coherent and in line with the contractual requirements-, and take into account constraints on rainy season construction in relation to the conditions pertaining to the site. The review will take into account the E&S activities and the C-ESMP and other plans, if relevant to ensure full compliance of E&S requirements during construction and maintenance;
- ii) Identify from the approved program the necessary information to be provided to the Contractor and ensure that it is made available in a timely manner, including information on climate change impact forecasting, vulnerable road sections, ESS measures, etc.;
- iii) Make sure that the Contractors mobilize the required equipment and qualified foremen and workers;
- iv) Ensure that the Program of Works includes: time for mobilization, field investigations and tests where needed; deadlines for rehabilitation per km, monthly activities, critical path activities, regulatory clearances and permissions; planning for maintenance works; quality control of works; allowance for adverse weather conditions; planned public, political or social events; a general description of the works method(s) the Contractor intends to adopt; and, the major stages in the execution of works. This will also include the implementation progress of E&S measures especially those related to the payment of compensation (if needed) and GOL approval;
- v) Record and ensure that the Contractor is making available all documents in accordance with the contract;
- vi) Ensure that the Contractor conforms with contract requirements, specification, standards, national and local requirements, and agreements with authorities and approvals regarding: choice of materials and resources; list of authorized sub-contractors base on the stipulated in bidding documents; method logistics including earth moving related issues and materials; asphalt pavement; adequate responsibilities of foremen and key staff responsible for the works; labor requirements; ESHS measures including pollution control and waste management; health and safety issues including the fight against HIV Aids, Covid-19 prevention and contribution to the fight against gender-based violence, sexual harassment and child abuse and human trafficking, as relevant; and proper management of safety risks especially those related to UXO and hazardous materials such as collection and disposal of toxic substance, used oil, and explosives.

Task 5: Review of the Contractor’s Quality Assurance Plan

The Consultant shall review the Quality Assurance Plan proposed by the Contractor which must include and describe the role of the self-control unit under OPBRC, including but not limited to:

- i) Organization of the quality assurance tasks, the responsibility and authority for the management, who can sign letters and claims with responsibilities for quality assurance;
- ii) Attendance in meetings with DoR/MPWT and International Financial Institution (IFI);
- iii) Records and reporting;
- iv) Improvement of road conditions;
- v) Contract administration documents, archiving and as-built drawings;
- vi) Management of suppliers and sub-contractors;
- vii) Inspection and testing of the works to ensure compliance with quality requirements, control method, extent of method, acceptance criteria; procedures to rectify any case of non-compliance;

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- viii) Control of the quality and quantity of materials and timely delivery;
 - ix) Non-conformance reports and proposed remedies;
 - x) Internal audit with remedies in case corrective actions are proposed by auditors.

Task 6: Review Claims for Time Extension and Payment for Emergency Works

The Consultant shall review and analyze claims for Time Extension and Payment for Emergency Works and actions to mitigate safety risks, including but not limited to:

- i) Advise and assist DoR/MPWT on issues relating to changes to the Contract, including but not limited to any addition, extension and litigation/arbitration and assist on resulting consequences;
- ii) Review, investigate and prepare report on claims submitted by the Contractors within 30 days of the submission, establish admissibility to determine legitimate and justified costs and recommend, where appropriate, settlements;
- iii) Investigate fully all claims to establish admissibility under the Contracts to determine legitimate and justified costs, in case of emergency works;
- iv) Act as Mediator and aim at settling amicable dispute quickly without/or prior to involvement of external parties; and,
- v) Advise DoR/MPWT on the claims with proposed solutions.

Task 7: Review the Contractors Works Progress Reports

The Consultant shall verify and make recommendations on the progress for rehabilitation and improvement works. In case of Emergency works, the Consultant shall verify that work orders are delivered as per the expectations of DoR/MPWT and in full conformity with the Project requirements and provide recommendations as appropriate. Works progress reports should include a clear indication of interventions made during the reporting period. Such reports should comment on pattern of traffic, road traffic management, prevention of accidents and include proposals to improve traffic safety and other safety measures during construction and maintenance works.

Task 8: Review the Contractor’s Milestone (for OPBRC) and Substantial Completion Report

The Consultant shall review the reports on completed milestones prepared by the Contractor and advise DOR, as appropriate, to make the related payment. At time of review, the Consultant shall ensure completeness of the reports submitted by the Contractor to include an overall description of the implementation, major delivery events, and achievements including those related to safety and other ESS measures. The Consultant shall only recommend payment for works if they have verified that the works comply with all contractual requirements and quality standards. The Reports (issued at the completion of each Milestone under OPBRC for payment to the Contractor) shall include, but not be limited to:

- i) A brief executive summary;
 - ii) Description of works implementation for the relevant Milestone section;
 - iii) Details of works executed, including any major works difficulties encountered, including major climate event impacts;
 - iv) Design changes, if any, for the relevant Milestone section and clear information whether similar changes are proposed for future Milestone sections;
 - v) The Consultants’ appraisal of Contractor performance;
 - vi) A summary of Contractor E&S Implementation Compliance Status especially those related to the approved C-ESMP and the implementation of the GRM;
 - vii) Works records;
 - viii) Quality control tests carried out and their results and compliances with the performance
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- and technical specifications;
- ix) Conclusions.

The full Completion report issued when all Rehabilitation and Improvement works are completed shall include, but not be limited to:

- i) An executive summary;
- ii) Mobilization details; description of the works implementation; detailed financial cost of emergency works, if any; details of works executed, technique employed and types, quality, quantity and sources of materials used, including any major works difficulties encountered. This shall include information on specific activities and designs related to sections identified as specifically vulnerable to climate change impact based on relevant vulnerability mapping, and road crash-prone locations;
- iii) Design changes (from approved by DoR/MPWT), if any;
- iv) The Consultant's appraisal of Contractor performance;
- v) Assessment of any complaints, accidents, disputes;
- vi) Occupational health and safety statistics (man-hours worked without Lost-Time Injuries (LTIs), number and gravity of LTIs and number of fatalities, etc.)
- vii) Reported implementation status of community health and safety (cases of sexual harassments, code of conduct);
- viii) Critical studies with remedies on significant technical problems which may have arisen during the improvement and rehabilitation period;
- ix) A summary of Contractor E&S Implementation Compliance Status and the implementation of the GRM;
- x) Works records;
- xi) As-built drawings;
- xii) Details on payments made under the rehabilitation phase;
- xiii) Planned and achieved work's program
- xiv) Conclusions.

Task 9: Review Environmental and Social, Health and Safety Instruments and compliance by the Contractor

The Consultant shall, when reviewing the Contractor documents and report especially those related to C-ESMP, the final ESCOP, ESHS and COC documents, as well as any other relevant plans (RP, EGEP, SEP) and at the time of site visits during rehabilitation and maintenance phase, ensure that none of the safety and ESS regulations have been violated or otherwise ensure that appropriate measures are applied to prevent E&S, safety and security breaches resulting in impacts on environment or people and accidents (including to members of the public). The Consultant's review of ESS and safety issues shall include, but is not limited to:

- i) Assist the Client and work with local authorities to organize consultation events with residents/PAHs well ahead of the construction activities, as stipulated at the sub-project-level through respective RPs, C-ESMPs and/or SEP and ensure that the work starts only once compensation has been made available;
- ii) Review and verify the accuracy of all permits and clearances (e.g. Construction permit; Water rights; Environmental permits; Land availability; Land acquisition in accordance to the RP in line with the RPF; Right of way, UXO Clearance etc.) that have been obtained prior to construction in order to ensure completeness;
- iii) Support MPWT and RC in establishment and monitoring of functioning of the Grievance Redress Mechanism (GRM), consistent with the project's SEP, including the follow-up on the resolution of any complaints or grievances in relation to environmental and/or social matters. Review the project-specific ESMPs, SEP and, when required, RPs, after 6/12 months of implementation and amend them based on outcomes;

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- iv) Ensure that the C-ESMP reflects maintaining highest standards of pollution management and adhere to international standards on air, water, noise quality and vibration levels like those given in AIIBG EHSF Guidelines;
 - v) Ensure that the C-ESMP has reliable and wide-ranging baseline data collected and reported on water (surface and ground) and air quality, noise, and vibration levels likely to be impacted during the project construction works;
 - vi) Approve after due revision the contractor’s ESMP, SEP and, when required, RP, during the execution of the works, instruct the Contractor to update the ESMP, SEP and, when required, RP, if it becomes necessary;
 - vii) Supervise the contractor’s implementation of the ESMP, C-ESMP, SEP and, when required, RP, and report on compliance of the contractor with the ESMP, C-ESMP, SEP and, when required, RP, ESHS Works Requirements, LMP and COVID-19 preventive measures;
 - viii) Document Contractor’s non-conformances, identify corrective actions and follow-up on correction/remediation;
 - ix) Check if the Contractor provides instructions and required trainings to workers, subcontractors and suppliers on the respective ESHS requirements, in line with the LMP and comply with it including, among others, prevention on SEA/SH
 - x) Review the Contractor’s progress reports, and check if detected non-conformities are documented and analyzed and are addressed by corrective actions;
 - xi) Follow-up on the resolution of any complaints or grievances in relation to ESHS and Labor Management Plan (LMP) included at the project’s ESMPs;
 - xii) Inform the PMU on any ESHS related situation that might arise which could jeopardize the successful completion of the Project. Reflect such situations in the periodic reporting;
 - xiii) Ensure that non-conformities are addressed through measures adapted to the severity of the situation;
 - i) Undertake regular site visits to sub-project sites and workers camps for verifying the implementation of the specific E&S measure, including the verification of stakeholder engagement and provisions to prevent SEA/SH are in place, as well as ensuring that in the event of a noncompliance, agreed remedial actions are agreed to be applied and documented. Request the Contractor to remove any person employed on the site or works if the person persists in any conduct which is prejudicial to safety, health, in protection of environment or in the case of complaints of Sexual Exploitation and Abuse, sexual harassment, VAC.
 - xiv) Re-act timely when seeing breaches with the safety regulations or when, in his own judgment, there is a prevailing event that may result in an accident, make timely and practicable recommendation on the spot;
 - xv) Stop the works if the way of execution is endangering the life or limbs of any people;
 - xvi) Organize and monitor the reporting of serious incidents and accidents and inform the Client as soon as practicable about any major accident;
 - xvii) Monitoring, reporting and evaluation of the ESMP, C-ESMP, SEP and RPs implementation by contributing to the regular progress reports throughout the Project implementation phase;
 - xviii) Undertake other actions related to ESHS aspects of the Project, in order to ensure full compliance of the Project with the provisions stipulated by the project’s Labor Management Plan (LMP), included in the project’s ESMP.

Further tasks and details are provided under Task 24-27.

Task 10: Review and Monitor Health and Safety Management Plans (HSMP) of the Contractors

The Consultant shall review the HSMP proposed by the Contractors. The Consultant shall ensure that the C-ESMPs will incorporate adequate measures in line with the HSMP and key activities may include, but are not limited to:

- i) Ensuring that contractors and workers signed the “Codes of Conduct” before mobilizing manpower and receive training on their COC shortly after mobilizing;
- ii) Systematic identification of existing and new hazards on the works site;
- iii) Minimization of significant hazards, where elimination and isolation are both impractical;
- iv) Update method statements to describe and implement new work procedures as required to minimize hazards;
- v) Review the generic and site-specific traffic safety management plan prepared by contractors, taking into account safety of road users, resident along the road and workers and including considerations on temporary access to and from houses and road sides during the works;
- vi) Ensure the provision and use of appropriate protection measures (PPE) and the availability for workers to be properly protected with safety supplies including, but not limited to, emergency kits with drugs and medicines, safety shoes, safety hats and appropriate protective clothing;
- vii) Make sure that the construction works include have provisions in place consistent with the AIIB’s interim note on “COVID-19 considerations in construction/civil works projects”. and/or current Covid-19 measures mandated in Lao PDR.
- viii) OCHS induction training material and on-going training modules, as well as specialized trainings for hazardous activities (e.g. operation of heavy machinery, working in confined space, lifting);
- ix) Ensure that the age of employment and the working conditions of the project workers comply with the project’s Labor Management Plan (LMP);
- x) Pre-determined and known to workers emergency procedures dealing with accidental spillage, pollution or imminent danger;
- xi) Ensure regular review and assessment of each hazard identified and monitor employees’ exposure to these hazards;
- xii) Ensure that regular medical checks are done for workers and normal working hours are followed;
- xiii) Incident and accident reporting procedure and methodology for statistics compilation for OCHS performance;
- xiv) Ensure reporting and recording of work site incidents so health and safety problems can be addressed quickly and regularly;
- xv) Proper preventive signs significantly ahead of works zone for drivers to be informed of reduced speed and detours;
- xvi) Report to DoR/MPWT any significant issues related to Health and Safety; and
- xvii) Recommend sanctions in case of non-compliance with Environmental, Social Health and Safety (ESHS) measures.

Task 11: Review the Emergency Procedures and Contingency Plan of the Contractors

The Consultant shall review the Emergency Procedures and Contingency Plan to be submitted by the Contractors to ensure the Plan at the least includes:

- i) An effective communication and event recording system;
- ii) The name, contact number and specific duties of the Contractor’s nominated Emergency Duty Officer who shall be fully authorized to respond to an emergency event 24/7;
- iii) Availability of priority contact numbers in case of emergency, e.g. police, hospitals, ambulances, fire brigades and others as may be needed;

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- iv) Response procedures for emergency events including major climate events, road crashes during works, and seismic events ;
 - v) Possible detour routes in the event of road closure;
 - vi) Due consideration shall be made to minimize the potential negative impacts of the emergency works.

Task 12: Review of Technical Documents Prepared by the Contractors

The Consultant shall review all technical documents submitted by the Contractors (including the C-ESMP) within 10 days of receipt. The Consultant shall promptly provide DoR/MPWT with report/s, analysis and interpretations and provide in a reasonable time the **proposed** decisions on all claims, disputes and other matters in questions relating to the execution or progress of work or the interpretation of the contract documents.

Task 13: Supervise Contract Changes

The Consultant shall evaluate:

- i) the Contractor’s proposals for any modifications of drawings or specifications and report them to DoR/MPWT with recommendations;
- ii) Inform DoR/MPWT of intended changes including effects on time schedule, quality, durability and function including on design features specifically for climate change impacts, and get Employer approval for the intended variation;
- iii) Examine the Contractor’s proposals for changes and provide recommendations to DoR/MPWT for approval, in case of substantial changes affecting costs;
- iv) Under exceptional conditions, such as emergency and unforeseen works, issue Work Orders to the Contractor including, but not limited to, time schedule, payment terms, and any technical deviations and quality requirements;
- v) Supervise any works carried out with respect to a variation and maintain detailed records of any such works;
- vi) Ensure that all relevant project documentation, including site drawings, is updated to reflect the changes and given to Contractors and DoR/MPWT;
- vii) Be responsible to follow up on all works under a change order and final acceptance at completion;
- viii) At completion of the works under a change order, ensure that the payments to the Contractor are in line with the change order / work order and in line with the rates and prices set out in the original contract;
- ix) In the event of disagreements on rates and prices between DoR/MPWT and the Contractor, the Consultant shall recommend rates and prices to be approved by DoR/MPWT and confirmed by an Amendment to the original contract; reasonable adjustments should consider the actual costs with evidence included.

Task 14: Monitor Quality Control of Materials and Workmanship

The Consultant shall monitor the Contractors’ testing and checking of the quality of the as-delivered materials and works implemented through the contractor’s self-control unit under OPBRC to verify compliance with all specified requirements and the contractor’s own quality plan through intermittent testing and inspection of the works with the supervision of remedy or reject if found the sub-standard work.

Task 15: Verification of Materials Quality

While under OPBRC the performance responsibility is with the Contractor, the Consultant shall verify (on a sampling basis) that the Contractor is:

- i) Performing laboratory and/or field tests on the quality of the materials or have obtained from its suppliers, satisfactory materials specifications and quality assurance, testing and warranties. The DPWT laboratories of the provinces and others can be used for this purpose;
- ii) Using materials of satisfactory technical characteristics, quality and quantity and that the extraction is in conformity with the legislation and, as required, has obtained extraction authorization.

Task 16: Compliance with Construction Standards and Levels of Service for the Works and Services

The Consultant shall make sure to fully understand the contractual requirements to be fulfilled by the OPBRC contractor for all works and maintenance services. The Consultant shall verify compliance by the Contractors with those requirements. In case of any non-compliances, the consultant shall apply (i) the appropriate payment reductions for non-compliance with service levels, (ii) liquidated damages for delays in completing works. The consultant shall not recommend the payment of works that do not fulfill the quality requirements. Milestone payment to the Contractors will be made upon completion of the milestone section, in full compliance with the specifications, which should be certified by the Consultant. Subsequent milestone payments will be dependent on the road sections under previous milestones meeting the performance specifications. The Consultant shall monitor the level of compliance with the contracted specifications and service levels continuously during the assignment, and inform the Employer on any non-compliance with the remedy actions recommended or if finds non-compliance has tendency to occur, the consultant shall send the writing notice to contractor and furnish copy to the employer. The Consultant shall issue notification and follow-up on remedies approved by the Employer and report thereon, with evidence given that the Contractors reacted fully or not to such notification. For determination of compliance with specifications and service levels and timely implementation of initial and remedial works, the Consultant shall, but not limited to:

- i) Conduct pavement durability measurements and visual condition inspections to ensure that there are no potholes, no cracks or other defects outside the permitted limits;
- ii) Check the quality of the materials and verify compliance with all specified requirements through intermittent random testing and inspection of the works;
- iii) Check if the roads are passable with certain level of comfortable and open to traffic;
- iv) Check that all performance and design standards in the OPBRC contracts are met at all times during the contract period;
- v) Check that at least two times the first half of the road thickness and the second half after the pavement has been made on the roughness measurements (IRI) carried out by the contractor meet the specified requirements, including calibration of the measuring equipment according to standard procedures (See, for example, Guidelines on Performance Specifications for OPBRC, August 2020).
- vi) Check that the pavement and shoulder widths are as specified.
- vii) Check that cut slopes and embankment slopes comply with requirements.
- viii) Check that all drainage structures are clear of debris and water can be evacuated effectively.
- ix) Check that all ditches and drains are clear of debris, without erosion and functioning properly.
- x) Check that all ancillary equipment along the road and on bridges (guard rails, signs etc.) are present and in the specified condition.
- xi) Check that all vegetation is within an acceptable height;
- xii) Check that there are no blockages, nor damage to any part of the bridges or culverts and that no cracks or signs of failure are visible.

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- xiii) Track and monitor the level of compliance with the “Service Level Requirements” of completed milestone sections and include the results in the report supporting milestone payments.
 - xiv) Check compliance with ESHS obligations, and that remedies have been accounted for any noncompliance with the ESF contractual commitments and obligations;
 - xv) In liaison with the contractor, identify ways to address any ongoing or recurrent compliance issues.

Task 17: Monitor and Control Costs

The Consultant shall monitor and control quantities/costs for the contracts, noting that the primary payment mechanisms are: (i) for rehabilitation works under the OPBRC, for completion of milestones and (ii) for maintenance services, meeting of performance standards and service levels (i.e. the Contractor is not directly paid for the quantity of inputs, apart from Emergency works).

The Consultant shall make accounts of current quantities executed and related cost estimate for the works executed, including for issuing Interim, Final and Maintenance Payment Certificates, work orders and invoices. In case of change orders, the Consultant shall provide a summary of the agreed scope of the works that may be issued by DoR/MPWT. The Consultant shall:

- i) Agree with the Contractor on drafts for the payment certificates and make recommendations to DoR/MPWT on payments;
- ii) For the OPBRCs, interim milestone payments shall be made at completion of each milestone. The Interim Milestone Payments shall be numbered consecutively.
- iii) Receive and record evidence of payments.

The Consultant shall make a thorough check of the payment certificates and their enclosures and attachments including checks on quantities and amounts. Any review of payment claims for the Contractor shall be in accordance with the contracts legal binding, technical and ESF conditions. The Consultant shall ensure when certifying payment claims that due remedies have been accounted for any noncompliance with the specification, the ESF contractual commitments and obligations. Upon review and within a maximum of 14 days of receipt of claims, the Consultant shall forward the applications to DoR/MPWT with recommendations for payment (if appropriate). With respect to Emergency Works as well as any possible additional works approved, the Consultant shall ensure that all applications detail the actual quantities and value of works completed to date compared with the Change Order and unit rate for each item and in accordance with the Contract. The Consultant shall also ensure that applications account for payment due to the Contractors including payment reduction, discounts if any, and retention for:

- a) Emergency Works; and
- b) Other payments to which the Contractor is entitled.

Task 18: Emergency Works

Lao PDR is subject to floods and other natural disasters. In addition to supervising the planned improvement works, emergency works, either recommended by the Consultant, the Contractor, or by DoR/MPWT, shall be dealt with urgently. In such cases, emergency designs and cost estimates based on the contracted rates for works (BOQ in the Contractor’s bid) shall be submitted to DoR/MPWT for timely approval and issuance of work orders. A portion of the funds allocated to works rehabilitation will be kept available and managed so as to ensure funds are to be available for emergency works. All ESS requirements defined in C-ESMP and ESMP will be followed during such events.

Task 19: Benefits Monitoring & Evaluation

The Consultant will develop and implement a Monitoring and Evaluation (M&E) framework to monitor the project performance, in line with the results framework in the AIIB Project Appraisal Document (PAD), and evaluate the project's benefits in comparison with those initially expected. This will require initial baseline survey, mid-term evaluation and post-construction evaluation. The M&E framework shall include specific language and indicators (if appropriate) on climate resilience measures.

Task 20: Compliance with Specified Levels of Service for maintenance services

The Consultant will monitor the Contractor's compliance with the levels of service specified in the OPBRC in accordance with the OPBRC contract and Specifications. The Consultant will also monitor any Emergency Works, as ordered by DoR/MPWT. The responsibility for compliance with the service levels will be on the Contractor. Therefore, the Consultant shall review, comment and make recommendations on the adherence to service levels by the Contractor in line with the procedures defined in the OPBRC Specifications. In case of major and/or consequential and/or repetitive lack of performance and compliance, DoR/MPWT may terminate the OPBRC subject to contract provisions. The Consultant shall inform DoR/MPWT on any significant nonconformities with the levels of service and propose remedies. The Consultant shall issue notification and follow up on remedies approved by DoR/MPWT and report on these, with evidence given whether the Contractor reacted fully to such notification. For determination of service level compliance, the Consultant shall:

- i) Check the compliance with the performance indicators specified in the OPBRC contracts. These indicators cover variables/parameters such as potholes, vegetation, drainage, roughness, and management (e.g., reporting, data supply);
- ii) Note the occurrence and extent of any major climatic events and the eventual need for emergency works;
- iii) Make recommendations on the magnitude of any payment reductions based on the assessed performance;
- iv) Work with the Contractor to identify ways to address any ongoing non-compliance issues.

Task 21: Supervise and Monitor Implementation of Environmental and Social Management Plan of the Contractor (C-ESMP)

In additional to Tasks 9 and 10 described above, the Consultant will monitor and report on implementation of the ESMP and its sub-plans during the rehabilitation and maintenance phase. This will include:

- i) Provide guidance, orientation and training to the Contractors during the development of the Contractors' Site-Specific Environment and Social Management Plan (C-ESMPs) and the Alignment Sheet which shall be completed at least three months prior to the start of construction. Due attention shall be given to ensure compliance with the final ESCOP and COC to prevent Sexual Exploitation and Abuse (SEA), Sexual Harassment (SH), and Violence Against Children (VAC) during construction phase.
- ii) Review the environmental and social instruments and develop a work plan and methodology to supervise and monitor the implementation of the C-ESMP to be submitted and implemented by the Contractor, including key performance indicators to measure the compliance of the Contractor and efficiency of all mitigation and management measures;
- iii) Review and approve the C-ESMPs and the Alignment Sheet in order to be compliant with the (a) ESS requirements of the construction contracts as reflected in the project ESMP approved by AIIB, (b) the ECC approved by GOL, and (c) other ESS requirements as requested by AIIB;

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- iv) Review and approve the Contractor’s documents related to ESCOP, ESHS and/or the HSMP, and COC related to SEA/SH VAC, and activities related to SEA, HIV/AIDs as well as other documents related to ESS activities under Contractor responsibility;
 - v) Review the Contractor’s Management of Change (MoC) procedure to address environmental and social risks and impacts induced by changes in design, planning and other activities;
 - vi) Review the detailed design and work plan to be prepared by the Contractor to ensure that all operation areas, activities and material are generally considered in the C-ESMP and make recommendation for additional studies if required;
 - vii) Review ESHS risks and impacts of any design change proposals and the implications for compliance with the Project ESMP, consent/permits and other relevant ESS requirements for the Project;
 - viii) Review the ESS screening for siting of auxiliary and temporary facilities and Conduct a due diligence of the borrow pits proposed for use by the Contractor to ensure that the borrow pits meet requirements set out in the Project ESMP;
 - ix) Before excavation works and removal of the existing pavement commences, review the re-utilization plan for removed material and undertake an inspection of and approve the contractors' disposal sites to ensure that the ESMP criteria for such sites are met;
 - x) Review documentation, resolution and reporting of non-compliance issues and complaints. Supervise day-to-day implementation of the C-ESMP of the Contractor.
 - xi) Carry out periodic environmental quality monitoring, e.g. noise level, water quality, and air quality as agreed with the AIIB;
 - xii) Prepare Environmental and Social Monitoring and ESMP Implementation reports as required by the AIIB, AIIB and/or GoL (per ESMP, IEE/EIA Procedures). As part of the report, document environmental and social issues and complaints and maintain a photographic record of sufficient quality and quantity of key issues identified and actions and timescales agreed upon for their resolution.
 - xiii) Review and monitor employment of local labors and communities, specifically women and ethnic minorities and working conditions during construction and ensure that core labor standards and code of conducts are followed and monitored during implementation. This includes integrating necessary provisions in bidding documents and contracts to ensure that Project goals can be reached and indicators measured. Ensure that the Contractor complies with all applicable labor laws.
 - xiv) The Consultant shall review and monitor all aspects of the establishment, reporting and operationalization of the Grievance Redress Mechanism (GRM) according to ESMF, RPF, ESMP, RP and EGEF requirements for the Project and in close consultation with EDPD/PTI and local authorities;
 - xv) Ensure that the PAPs/PAHs are fully aware of the grievance redress procedure and the process of bringing their complaints, investigate the veracity of the complaints, and recommends actions/measures to settle them amicably, fairly and transparently before they go to the redress committee or the courts of law;
 - xvi) Assist in establishing GRM for workers and monitor the labor working conditions and other rights in conformity with applicable Legislations and Funding Agencies’ Social Policy; Coordinate and work closely in all of the ESS issues with EDPD/PTI of MPWT and the DPWTs, the Project Resettlement Committee (PRC), and local authorities of the project Provinces.

Task 22: Support in Implementation of Resettlement Plan (RP)

The consultant shall assist DoR/MPWT and EDPD/PTI in carrying out any leftover tasks of Resettlement Plan (RP) implementation and also addressing any additional resettlement impacts including the relocation of public utilities caused by the detailed design as well as preparing the RP closure report. The tasks shall include but not limited to the followings:

TOR – ISWS-OPBRC, Climate Resilience Improvement NR13SE (km 21-71) Project (P000618)

- i) To provide an orientation and training on RP including principles, process, implementation and monitoring arrangement for EDPD/PTI, PMU, DPWTs, OPWTs, PRCs established under the project with the objectives to build their capacity to implement and supervise the RP implementation and compensation;
- ii) To develop and update the detailed Implementation Work Plan for RP that must include (i) a clear timeframe, (ii) roles and responsibilities of agencies involved, (iii) organizational chart, (iv) weekly and monthly milestones and monitorable indicators of the RP implementation, (v) a mechanism to deal with the delays, (vi) development of a user-friendly database, documentation process and financial flow system to ensure timely processing of compensation payments. The Work Plan must be prepared in line with the project's construction timeline, Result Framework and Annual Work Plan.
- iii) The Work Plan will include any additional resettlement impacts caused by the detailed design; Review and update RP as necessary based on detailed design; coordinate with various agencies in preparing the procedures for timely land acquisition and disbursement of compensation to project affected persons as well as consultations with affected people;
- iv) To implement the improved implementation work plan and ensure the achievement of milestones and to take immediate corrective actions if milestones are not met.
- v) Assist with implementing, data recording and reporting on progress as well as, and monitor land acquisition, involuntary resettlement, compensation and other relevant activities being undertaken by EDPD/PTI in terms of compliance with conditions stated in the RP and Funding Agencies' ESF; Social Policy;
- vi) Assist with ensuring continued access to land and properties of households not relocated, but who may experience temporary or permanent access restrictions or difficulties during the construction or operations phases.
- vii) Ensure consultations are carried out according to the Consultation Plan / Strategy.
- viii) Assist EDPD/PTI to implement GAP. Identify any further adverse gender-specific impacts of the Project and update GAP to reduce these. Suggest methods for monitoring the benefits that are expected to be accruing to females;
- ix) To establish and build capacity of village level grievance/resettlement committee (locally known as village mediation unit) to handle project related grievances that maybe received from PAPs/PAHs and who believe they are affected with respect to resettlement process;
- x) To conduct regular site visit, observe and interview PAPs/PAHs to review the RP implementation progress and provide advisory and technical support to address issues and grievances that may be raised and identified during the site visit. Special attention shall be paid to the vulnerable, ethnic and female that headed PAHs;
- xi) To work with concerned government agencies including (but not limited to) MONRE and their local offices (PONREs, DONREs), EDPD/PTI, DPWTs, OPWTs, and other concerned agencies, PRCs and concerned project committees or teams assigned from the ministry and the project provinces to successfully implement RP, EGEP and GAP.
- xii) Assist in the capacity building of EDPD/PTI and PRC staff on social management through on-the-job training on social assessment techniques, mitigation measure planning and implementation, supervision and monitoring, and reporting;
- xiii) Regarding the cost of engaging any third parties or purchasing/renting necessary equipment to conduct the survey listed in the TOR, such as IRI, E&S survey, etc., it should be clearly stated that the cost shall be included in the bid price.
- xiv) The consultant shall assist DoR and PTI in carrying out any leftover tasks of Resettlement Plan (RP) implementation and also address any additional resettlement impacts including the relocation of public utilities caused by the detailed design.

Task 23 Support for the Implementation of the Ethnic Group Engagement Plan (EGEP)

The consultant will provide technical and management support to EDPD/PTI (or sometimes it is called ESMU established for the project) and PRCs to carry out the following tasks:

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- i) To provide an orientation and training on EGEP including principles, process, implementation and monitoring arrangement for EDPD/PTI, PMU, DPWTs, OPWTs, PRCs including the Lao Front for National Development (LFND) with the objective to build capacity to implement and supervise the EGEP implementation during the resettlement process;
 - ii) To develop and update an Implementation Work Plan for EGEP that must include i) a clear timeframe, (ii) roles and responsibilities of agencies involved, (iii) organizational chart, (iv) weekly and monthly milestones and monitorable indicators of the EGEP implementation, The Work Plan must be prepared in line with the Project's Construction Timeline, Result Framework and Annual Work Plan;
 - iii) The Work Plan will include any additional the EGEP impacts caused by the detailed design; Review and update EGEP as necessary based on detailed design;
 - iv) To assist EDPD/PTI and PRCs particularly the representatives from LFND to establish and build capacity of village level grievance/resettlement committee (locally known as village mediation unit) to handle project related grievances that maybe received from PAPs/PAHs and from those who believe they are PAPs/PAHs in the affected ethnic villages along the NR13SE-W. This would be the same committee to be established for RP, but a tribal or clan leaders or representative elected by the ethnic community will be encouraged to participate in the committee;
 - v) To conduct regular site visit, observe and interview PAPs/PAHs to review the EGEP implementation progress and provide advisory and technical support to address issues and grievances that may be raised and identified during the site visit. If necessary, focused group discussion and individual interview may be applied with women of ethnic communities to ensure their voices are heard. who may be shy and less represented.
 - vi) To ensure EGEP implementation is in line with agreed plans and AIIB Guidelines and Policies.

Task 24: Support the Implementation of the Labor Management Plan (LMP)

The consultant shall assist DoR/MPWT and EDPD/PTI to carry out the following tasks:

- i) Review the LMP proposed by the contractors as part of C-ESMP and ensure compliance with the guidelines and the project's ESMP.
- ii) Ensure that the age of employment, and the working and living conditions of the project workers comply with the project's Labor Management Plan (LMP);
- iii) Monitor the Grievance mechanism to be setup by the contractors for his staff
- iv) Follow-up on the resolution of any complaints or grievances in relation to ESHS and Labor Management Plan (LMP) included at the project's ESMPs;
- v) Monitor compliance with LMP on regular basis and report on it as part of the monthly, quarterly and bi-annual reporting.
- vi) Undertake other actions required, in order to ensure full compliance of the Project with the provisions stipulated by the project's Labor Management Plan (LMP), included in the project's ESMP.

Task 25: Safety Assessment of Road Infrastructure and Road Safety Awareness

In parallel to the Monitoring Consultant services, the Employer will contract the services of a Road Safety Auditor as a Consulting Firm, for the Road Safety Audit (RSA) of NR13SE. The initial Road Safety Audit shall be performed during the development of the Conceptual Design, which will serve as the basis for the Bidders to prepare their financial proposals. The Monitoring Consultant shall assist the Employer by: i) collaborating with the RSA Consulting Firm; ii) reviewing and, where needed, commenting the reports submitted by RSA to the Employer; iii) where approved by the Employer, adopt and implement the recommendations by the RSA; iv)

ensuring prompt compliance by the Contractors in implementing the recommended and agreed measures in their detailed designs.

Upon completion of civil works, a RSA post-construction will be conducted, After the completion of the audit, the consulting firm will prepare a final report that summarizes road characteristics and safety conditions.

Besides, the Monitoring Consultant shall organize periodically training sessions and awareness raising on road safety, for all project involved stakeholders, i.e. Employer, Contractor and local communities, with training courses to be organized at the contractor’s camp, village and community halls, as well as schools along the project roads. Most importantly, all communities shall have participated in at least one road safety awareness campaign during the works and before opening of the rehabilitated road to traffic.

Task 26: Remote monitoring and electronic data sharing

The Consultant shall make use of innovative ICT tools to enable remote and real-time monitoring of work progress during construction and asset condition changes during the maintenance period under OPBRC including using web-based/mobile applications with geo-referenced data/pictures and regular contracts status data that can be accessed by MPWT and AIIB.

The following supervision aspects shall be considered:

- Progress reporting with accompanying documents and media; and
- Verification of Project execution, progress and quality by MPWT and AIIB staff (and the Consultant, in case he cannot be present on site) through pictures (with GPS coordinates), videos and quality test documents (e.g.: laboratory results).

At least on monthly basis, the Consultant shall equip at least one vehicle with a camera (either standalone or use phone built-in camera) with linked Mapillary software (refer to www.mapillary.com) or equivalent installed on a suitable device. The images shall be saved at a maximum of 20-m intervals and be uploaded to the Mapillary (or equivalent) server within 72 hours of completion of the site visit. During the visits, the Consultant shall also ensure full compliance with the ESS requirements and C-ESMP and minimize potential negative impacts to local communities and local environment especially those related to safety of workers and local communities.

The Consultant shall store all information not only on a local server for the Project, but keep selected data and supporting documents (see below) accessible to PMU/MPWT, AIIB and any external stakeholder involved for review and verification purposes. Data shall be available on a data sharing platform / cloud proposed and entertained by the Consultant. The data-sharing platform shall have a web-based interface, where the basic folder structure of the Project can be determined. It furthermore should come preferably with a mobile application (with offline functionality). Users can upload data such as photos from their smartphones/ tablets through the mobile application and save it in an applicable (sub)folder. The Consultant shall create a multi-layered data structure through folders and sub-folders, with access permissions for the PMU/MPWT and AIIB to selected folders, to be agreed with the PMU/MPWT and AIIB at the start of the assignment.

Indicatively, access will be requested to the following data:

1. Essential for Review of IPC / monthly invoices
 - IPC
 - Attachments and measurement sheets (take offs of quantities)
 - Quality control summary or sample of quality control
 - Supporting photographs (Geo-tagged)
2. For Monthly and Quarterly Reports

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- Monthly works program
 - S-curve or other form of progress status
 - Summary of works and location of works
 - Summary of quality control tests carried out
 - Actual weather data (rainfall in particular)
 - Environment and Social information (grievances, safety on site, ESMP implementation, RP implementation)
 - Contractual issues if any
 - Progress photos (Geo-tagged)
3. For Annual Progress review and Financial Audits
- Video drive-through of the sections 1/year (or 2 times/ year), eventually aerial drone video
 - Financial and physical progress on site
 - Summary of quality control tests carried out
 - Information on E&S measures (grievances, safety on site, ESMP implementation)
 - Contract amendments, changes, extensions of deadlines
 - Payment proofs (receipts of contractors)

The information shall be updated on weekly basis, and the Consultant shall ensure that the data is stored safely, readily available in line with the agreed procedures and data presentation structure.

E. Time Schedules and Budget Management for Works

The TOR for Consultant covers the rehabilitation works and initial O&M phases for an estimated total 4-year (48 months) period.

It is expected that all rehabilitation and improvement works under the OPBRC for NR13SE will be completed after 3 (three) years. The maintenance services under the same OPBRC shall start at the beginning of the OPBRC contract, in parallel with the rehabilitation and improvement works, and will continue until the end of the 10-year OPBRC contract.

F. Consultant's Reporting Obligations

The Consultant shall prepare the reports listed below and submit those as required.

F.1. Inception Phase

Inception Report: The Consultant will produce an inception report that will include a master plan for the entire assignment, detailed work plan and schedule of tasks based on the consultancy contract and a time table for the mobilization of the key experts, the non-key experts and the support staff, including reporting on E&S matters. A specific section of the inception report shall be dedicated to ESMP, RP, EGEP and LMP implementation. The Inception Report shall include a work plan for the assignment, team composition, challenges anticipated and comments to the TOR, if any. List of people met and minutes of meetings shall be provided in Annexes, if any. The Implementation Work Plan for RP, EGEP shall include content described in these ToR. The draft Inception Report and Implementation Work plan shall be submitted to PMU and EDPD/PTI and the AIIB within six weeks after the date of contract signing. The final Inception Report and the implementation Work Plan shall be submitted within one week after receipt of approval from the PMU and EDPD/PTI and the AIIB.

F.2. Regular monthly and quarterly reports

Monthly Progress Reports: The Consultant shall prepare a concise monthly progress report, in a format to be agreed with DoR/MPWT. These reports will be sent to DoR/MPWT and the AIIB within one week of the end of the month. Such reports shall summarize the activities of the Consultant including those related to ESS and H&S activities, RP, EGEP and LMP implementation progress, the progress of the works contract in terms of physical and financial progress, all contract and design changes, the status of Contractor claims (if any), brief descriptions of the technical and contractual problems being encountered (and solutions recommended) progress and issues related to the implementation of the ESS activities and other relevant information. The draft template of the Monthly Progress Report for each package/section shall be submitted to PMU and EDPD/PTI and the AIIB within one month after the date of contract signing. The final template shall be submitted within one week after receipt of approval from the PMU and EDPD/PTI and the AIIB.

Quarterly Reports: The Consultant shall prepare a comprehensive quarterly report summarizing all activities including financial and ESS aspects of the works contracts, at the end of each quarter (not later than the 14th day of next quarter), and at other times for the Periodic Report when considered necessary by either the Consultant or DoR/MPWT because of delays in the construction works or the occurrence of technical or contractual difficulties including the impact of any major climate events. The quarterly report shall also summarize the performance of the Consultant's staff in implementing their monitoring supervision responsibilities. In addition, the report will also include progress and issues related to the implementation of environmental and social measures, as well as works' compliance with the requirements of AIIB and GoL.

Benefit Monitoring Evaluation (BME) Reports: The Consultant shall prepare three Benefit Monitoring Reports during the Assignment providing updates on economic analysis and key performance indicators of the project as defined in the M&E framework, comparisons with corresponding baseline information and subsequent analysis. The 1st BME report shall be submitted at the early project commencement as a baseline report, the 2nd report shall be submitted in time for the midterm project review mission, and the 3rd report at the completion of the Construction Phase.

Accident and Incident Reports: Reports of the circumstances of any significant incident occurring on the sites shall be promptly informed to DoR/MPWT, DPWT, and EDPD/PTI within 24 hours. Specific reports related to the incident will be prepared and submitted as required by the MPWT. The consultant will also conduct root cause analysis, make recommendations to avoid future incidences, as well as monitor and audit implementation of agreed recommendations.

ESHS Reports: The Consultant shall ensure the immediate reporting to DoR/MPWT, DPWT, and EDPD/PTI of complaints related to GBV and/or child abuse, any pollution incident/accident, any fatality and/or bodily harm affecting Project (including contractor) staff or project affected people, any public opposition, and the issuance of any notice or fine for breach of environmental, labor, health or safety laws and regulation or any significant Covid-19 outbreak.

Claims Reports: Reports detailing the assessment of every claim by a Contractor and submitted to DoR/MPWT.

(Milestone) Completion Certificates: Subject to approval by DoR/MPWT, the Consultant shall prepare Completion Certificates for milestones of rehabilitation works under OPBRC, or sections / lots for PBR and BCP works at the completion of the works for each package.

Rehabilitation works Completion Report: The Consultant shall prepare a comprehensive Completion Report when the Rehabilitation and Improvement works have been completed. The report shall summarize the methods of construction, the field and laboratory tests carried out, the monitoring supervision services performed, and recommendations for improvement for future projects of a similar nature to be undertaken by DoR/MPWT, including specific recommendations on improvements relating to infrastructure resilience. The report shall also provide information in traffic volume data and speed data, ESS issues, actions, and lessons learnt so that effective mitigation measures can be considered during the planning, design, and implementation of future road works under OPBRC.

Maintenance Services reports: The Consultant shall prepare monthly concise reports and quarterly comprehensive reports on the contractor's compliance with service levels and any other requirements under maintenance services. Any comments/recommendations on the ESS requirement should also be provided.

F.3. Reports on the Implementation of RP, EGEP and LMP:

RP and EGEP Completion Report. The draft Completion Report for each package shall be submitted to PMU and ESD/PTI and the Financiers within three months after completion of the RP implementation. Besides the completion status of the RP and EGEP, the report shall also include information regarding any outstanding grievances, including those that were escalated to go through the national legal system. The final version shall be submitted within two weeks after receipt of approval from PMU and EDPD/PTI and the Financiers. The reports shall be supported by evidence of compensation, minutes of the important meetings, key technical notes and summary of grievances received and addressed.

F.4. Environmental and Social Monitoring Reports (semi-annual and annual):

In close consultation with EDPD/PTI, the Consultant shall prepare and submit to the MPWT and AIIB, (within 14 days after the end of the period) a consolidated semi-annual and annual monitoring report for each package summarizing all environmental and social safeguard activities (ESMP, RPs, EGEP, etc.) including progress and records on GRM and other aspects related to road safety, workers OHS, employment, community health and safety, etc. The reports shall also summarize the performance of the Consultant's staff in implementing their supervision responsibilities. Preparation of a separate RP implementation and/or other monitoring reports may also be required during the Assignment as requested by the GOL and/or AIIB.

F.5. Copies of Reports and Language:

The numbers of hard and electronic copies of each report, and the distribution list will be advised by DoR/MPWT. It is envisaged that only a limited number of hardcopies will be required (not more than 2) and that distribution of electronic copies would be by email. Reports shall be written in English. All reports shall be provided in both MS Office (Word, Excel etc.) and PDF format. A copy of all reports will be also shared with Financiers after review and acceptance by DOR/PMU.

F.6. Proprietary Information

The Consultant shall safeguard all proprietary information made available to any of their staff, personnel, employees, contracted persons or sub-consultants or any person or entity involved in delivering the services.

G. Consulting Firm Minimum Experience

The Consultant is expected to be a firm or an association of consulting firms with the appropriate capabilities and experience to execute the services.

The following requirements shall apply to the firms to qualify for the assignment:

Criterion 1 - Supervision of road works and road maintenance: Having at least ten (10) years of experience in Works Supervision of national road improvement or rehabilitation contracts of equivalent or comparable value, scope of nature and at least five (5) years in Supervision of road maintenance; such experience in South/ South East Asia is a strong asset;

Criterion 2 - Type of road works and services: Having completed successfully at least one supervision/monitoring contract or equivalent of comparable value, scope and nature under OPBRC, OPRC, DBMOT with performance-based maintenance arrangements, successfully completed in the capacity of prime supervision or monitoring consultant (i.e. individually or as lead member of JV) in the past 10 years

Criterion 3: - Survey and planning in road works and services: Having completed successfully at least 3 road works supervision contracts of similar scope and nature performed in the past 10 years which included implementation and/or monitoring of RP, ESIA, ESMP for road construction, rehabilitation, or maintenance.

H. Level of Efforts (LOE)

Estimated LOE

The Consultant shall employ qualified engineers and other professionals who shall be competent to carry out the duties in accordance with the responsibilities specified in this Terms of Reference.

Consultant staff will be mobilized only after the notice to commence for the works has been issued to the Contractor and only then on an as-needed basis, depending of the Contractor work programs and their mobilization efforts. The Consultant shall manage staff inputs and reassign staff from time to time and as necessary, with permission from DoR/MPWT, to reflect the actual progress of the works.

The Consultant shall include in his proposal and assign the **key personnel** shown in the table below. The estimated Person-Months are indicatively **198 for Key-staff**.

Key personnel	Number	Number of person Months
1) Team Leader (TL)	1	48
2) Road Design Engineer (RDE)	1	5
3) Civil Engineer for OPBRC (CE-OPBRC)	1	5
4) Quality control / Materials Engineer (QCME)	1	36
5) Maintenance Performance Monitoring Engineer (PME)	1	48
6) Senior Environmental Safeguards Specialist (SESS) – part-time	1	8
7) Senior Social and Resettlement Specialist (SSRS) - part time	1	8
8) Road Safety Specialist (RSS) (local)	1	40
Total	8	198

Only the CVs of the key personnel will be evaluated against the ToR requirements.

Non key-experts to be included in the consultant’s proposal are the following positions and durations:

Non-Key personnel	Number	Number of person Months
1) Environmental Specialist (ESS) – (local)	1	48
2) Social Safeguard Specialist (SSS) – (local)	1	48
3) Occupational Health and Safety Specialist (OHSS)-(local)	1	48
4) Structure Engineer (SE) (part time)	1	5
5) Laboratory Technician	1	36
6) Benefits and Monitoring Expert (BME) (international, part time)	1	3
7) Contract Specialist (CS) (part time)	1	6
8) Geotechnical Engineer (GE) (part time)	1	4
9) Benefits and Monitoring Expert (BME-L) (local) (part time)	1	12
Total	12	210

The consultant’s proposal shall **not include the CV’s of the Non-Key personnel**. The CV’s for Non-Key personnel shall however be submitted prior to mobilization of any non-key staff and are subject to approval by the client.

The Key Personnel and Non-key Personnel listed below shall comply with the following minimum requirements:

I. Key Experts – Tasks and Minimum Qualifications

Position	Tasks	Required Qualifications
1. Team Leader/ Senior Resident Engineer (TL)	<p>As the Employer’s (Project Manager’s)s representative on site, the TL will monitor all activities and tasks stated in these TOR, and supervise all Experts, Personnel and Support Personnel of the consultant working under the consultancy contract.</p> <p>The TL shall ensure that the works are constructed, maintained and road operated in accordance with the provisions of the OPBRC contract and specifications. The Employer (Project Manager) is delegating to the TL all those powers and roles defined in these ToR.</p> <p>1)</p>	<p>Minimum preferable qualifications as Team Leader:</p> <ul style="list-style-type: none"> • Bachelor degree in civil engineering; • 15 years of proven relevant international experience in the past 20 years; • 10 years’ experience as Team Leader (highway engineer) leading road construction and/or maintenance projects; • Fluency in written and spoken English is mandatory.
2. Road Design Engineer (RDE)	<p>Services by the DE are to be provided throughout the final detailed design phase.</p> <p>The detailed design includes: geometric design; drainage; earthworks; pavement; road safety furniture; traffic signs and marking; bridge repair; environmental devices). The DE should have the required capacity to assess the development of the design stage, being responsible for:</p> <p>1) Review the detailed engineering design prepared by the Contractors, considering the Conceptual Design provided by DoR/MPWT as a minimum requirement;</p> <p>2) Identify sensitive points in each of the sections of the design, and timely propose remedial actions;</p> <p>3) Taking into consideration the review carried out, validate all the design process, aiming at recommending to DoR/MPWT the approval of the Final Detailed Design presented by the Contractors.</p>	<p>Minimum qualification requirements as Design Engineer:</p> <ul style="list-style-type: none"> • Bachelor degree in civil engineering; • 10-year experience in road design, of which 5-year experience as lead design specialist of design teams, familiar with quality management systems and requirements.

Position	Tasks	Required Qualifications
3. Civil Engineer for Output- and Performance -Based Road Contract (OPBRC) (CE-OPBRC)	Tasks: 1) Establishing monthly reporting formats and preparation of the initial monthly reports; 2) Monitoring compliance with service level requirements in line with the procedures established in the OPBRC Specifications and . 3) Providing training to MPWT, Contractor and other staff of the monitoring consultant on Performance-Based Maintenance concepts and implementation;	Minimum qualifications as Civil Engineer for OPBRC: <ul style="list-style-type: none"> • Bachelor degree in civil engineering; • 3 years' experience working in road performance-based maintenance projects, including asphalt concrete pavements. Fluency in written and spoken English is mandatory. xxx
4. Quality control and Materials Engineer (QME) – 1 person	Tasks: The civil works comprise the structural concrete works and pavement reconstruction with asphalt pavement, as defined by engineering design. The QME will be experienced in the materials and processes involved for road rehabilitation works including the use of unbound (aggregate and natural materials) and concrete materials as well as the construction of asphalt concrete pavements, and will be fully aware of the needs for proving materials in the laboratory, quality control and construction techniques in the field. The MPE will: 1) Review existing information and conduct site visits, review materials sources proposed by the Contractors; 2) Review the detailed engineering pavement design prepared by the Contractor, considering the Conceptual Design provided by DoR/MPWT as a minimum requirement; 3) During the construction verify the quality of materials used by the contractor to ensure they meet quality standards required; 4) Verify if the contractor's laboratory fulfils all requirement and that tests are carried out as required 5) Monitor the self-control unit (SCU) of the OPBRC-contractor; 6)	Minimum preferable qualifications as Materials and Pavement Engineer: <ul style="list-style-type: none"> • Bachelor degree in civil engineering; • 10 years' experience as the materials/design engineer working in road construction and /or maintenance projects of asphalt concrete pavement; • 2 assignments as the Materials/Design Engineer; • Fluency in written and spoken English is mandatory.

Position	Tasks	Required Qualifications
5. Maintenance Performance monitoring Engineer (MPME) 1 person.	Tasks: The MPME will monitor and verify the contractor’s compliance with the required service levels indicated in the OPBRC Specifications	Minimum preferable qualifications: <ul style="list-style-type: none"> • Bachelor degree in civil engineering; • 10-year experience as the resident engineer working in road construction and/or maintenance projects with asphalt concrete pavement; • 2 assignments as the Resident Engineer of road rehabilitation and improvement (or construction) projects of asphalt concrete pavement; • Fluency in written and spoken Lao is an advantage • Fluency in written and spoken English is mandatory.
Position	Tasks	Required Qualifications
6. Senior Environmental Safeguards Specialist (SESS) –Part time	<p>The SESS will be engaged on a part-time basis, with approx. 4 months during the first year of construction and 2 months per year for the second and the third year.</p> <p>The SESS will prepare a detailed action plan including environmental and social monitoring checklists to be completed by the ESS to ensure that the Environmental and Social Management System is established, implemented, maintained, the performance of which to be monitored by the SESS. He/she will address all environmental and social issues during the implementation of the OPBRC. He/she will also conduct environmental and social training and briefings to provide environmental awareness on AIIB ESF and the government environmental safeguards policies, requirements and standard operating procedures in conformity with the government’s regulations and international practice; ensure monitoring and reporting of Contractor’s compliance with contractual environmental and social mitigation measures during the assignment.</p>	Minimum qualifications as Senior Environmental Safeguards Specialist: <ul style="list-style-type: none"> • Degree in environmental sciences or equivalent; • Preferably 10 years’ experience in ESIA preparation, implementation, supervision and monitoring of projects including roads/highway projects funded by International Financial Institutions; • 8 years’ international experience; • Ability to effectively communicate and produce reports and documents in English of acceptable quality; • Experience in Southeast Asian countries would be an advantage;

Position	Tasks	Required Qualifications
	<p>The SESS will review and advise the relevant persons (of the ISWS) on the ESHS risks and impacts of any design change proposals and the implications for compliance with ESIA, ESMP, consent/permits and other relevant project requirements.</p> <p>The SESS will also help with the development and review of the Contractors Site Specific ESMPs (C-ESMPs). The SESS will prepare Quarterly Environmental Reports providing details of the Contractors activities (such as training programs, community meetings) and compliance with the ESMP and C-ESMP.</p> <p>The SESS will conduct a due diligence of the borrow pits proposed for use by contractor/provide advice to the ESS and Occupational Health and Safety Specialist (OHSS) in conducting the due diligence to ensure that the borrow pits meet requirements set out in the ESMP.</p> <p>Tasks:</p> <ol style="list-style-type: none"> 1) Provide supports to the Team Leader or Senior Resident Engineer(s), lead supervision of environmental and social tasks, and provide guidance to the ESS and OHSS to ensure contractors compliances to the project ESMPs; 2) Prepare a detailed action plan including environmental and social monitoring checklists to be completed jointly by the ESS and OHSS to ensure that the Environmental and Social Management System is established, implemented, maintained and will monitor its performance; 3) Help with the development and review of the Contractors C-ESMPs; 4) Conduct a due diligence of the borrow pits proposed for use by the contractor or guide the ESS and OHSS in conducting the due diligence to ensure that the borrow pits meet requirements set out in Project’s ESMPs; 	<ul style="list-style-type: none"> • Leadership, organizational and interpersonal skills. • Fluency in written and spoken English is mandatory.

Position	Tasks	Required Qualifications
	<ol style="list-style-type: none"> 5) Ensure baseline monitoring and reporting of Contractor’s compliance with contractual environmental and social mitigation measures during the assignment; 6) Undertake audits and inspections of Contractor’s accident logs, community liaison records, monitoring findings and other ESHS related documentation, as necessary, to confirm the Contractor’s compliance with ESHS requirements; 7) Review and advise the relevant person (of the ISWS) on the ESHS risks and impacts of any design change proposals and the implications for compliance with the Project ESIA, ESMP, consent/permits and other relevant project requirements; 8) Agree remedial action/s and their timeframe for implementation in the event of a noncompliance with the Contractor’s ESHS obligations; 9) Check that the Contractor’s actual reporting (content and timeliness) is in accordance with the Contractor’s contractual obligations; 10) Review and comment, in a timely manner, the Contractor’s ESHS documentation (including regular reports and incident reports) submitted to the Engineer and to provide advice to ensure the accuracy and efficacy of the documentation; and 11) Prepare quarterly reports that describe the work that the Engineer’s ESS 1, ESS 2 and Occupational Health and Safety Specialist (OHSS) have undertaken, the issues (including any Contractor’s ESHS noncompliance, details of the Contractors activities (such as training programs, community meetings) and compliance with the ESMP and C-ESMP, and identified issues and the actions taken to address such issues. 12) Provide specific advice and training to the ESSS, field engineers of DPWT, and key staff of local authorities and communities 	

Position	Tasks	Required Qualifications
	responsible for planning and implementation of the C-ESMP and key parameters for monitoring.	
7. Senior Social and Resettlement Specialist (SSRS) part time	<p>The SSRS will be a full-time position during of the pre-construction period until completion of implementation of RP and EGEP, then with short-term inputs are needed. The consultant will provide technical and management support to EDPD/PTI to carry out the following tasks:</p> <ol style="list-style-type: none"> 1) Technical lead in assisting the PMU, EDPD/PTI and RCs to develop RP and EGEP Implementation Work Plan, tracking system, and to monitor achievement of milestones in the Work Plan. This Work Plan will also include any additional resettlement impacts caused by the detailed design and relocation of public utilities; 2) Preparation and submission of inception report, progress reports and RP completion report to the PMU and ESD/PTI and the AIIB for review and approval; 3) Communication with and report to the PMU and ESD/PTI safeguard focal points and AIIB task team, over the course of RP and EGEP implementation to seek advice and support to RP and EGEP implementation; 4) Work with concerned government agencies including MONRE and its local offices, EDPD/PTI, DPWT/OPWT and other concerned agencies and teams assigned from the ministries and the project provinces, to successfully implement RP and EGEP; 5) Assist PMU and ESD/PTI safeguard focal points to establish and implement simple IT-based tracking system including tracking of the grievances in the GRM database; 6) Conduct regular site visits to: a) monitor RP implementation, compensation, replacement of assets lost (construction of new structures); b) livelihood and income restoration support. <p>Preparation and submission of ESS monitoring report including the status of grievance received and addressed, managing the schedule and tasks of national social consultants;</p>	<p>The consultant should have the following qualifications and experiences required to undertake her/his assignment:</p> <ul style="list-style-type: none"> • A minimum of Master Degree in a relevant social science or other relevant field; • A minimum of 10 years of experience in the management and monitoring of resettlement for Infrastructure, experiences related to road construction will be a plus • Good knowledge of MDBs, specifically AIIB, ESF, specifically ESS5 and ESS7 and relevant national legislation; • An understanding of Laos legislation such as Decree 84, 2016 on compensation and resettlement, MONRE's Instructions on ESIA and IEE, 2016, Land Law 2003 would be advantageous but is not essential • Ability to effectively communicate and produce reports and documents in English of good quality; • Leadership, organizational and good interpersonal skills;

Position	Tasks	Required Qualifications
	7) Through site and off-site monitoring, monitor LMP, SEA/SH and SEP implementation.	
8. Road Safety Specialist (RSS) –Part time	<p>Tasks:</p> <ol style="list-style-type: none"> 1) Review the detailed engineering designs with focus on road safety issues; 2) Review the road safety audit report (RSA) of the detailed designs to see if RSA’s recommendations for safety improvement have been adequately incorporated; 3) During the construction, monitor the contractors’ implementation of the traffic management plans (TMP) and advise the contractors’ performance with focus on road safety; 4) Assist the Department of Transport (DOT), Traffic Police and Department of Public Works and Transport of provinces (DPWT) and Office of Public Works and Transport of districts (OPWT) along project road to establish and implement a road safety awareness program for the road. 5) Provide specific advice and training to the ESSS, field engineers of DPWT, and the key local authorities and communities responsible for planning and implementation of road safety measures/campaigns. 6) Organise periodically training sessions on road safety, for all project involved stakeholders, i.e. Employer, Contractor and local communities. 	<p>Minimum qualifications for Road Safety Specialist:</p> <ul style="list-style-type: none"> • Bachelor degree in highway/civil engineering (preferably road safety subject); • Shall have a minimum of 10 years experiences in road design or road safety audits; • Fluency in written and spoken English is mandatory.

J. Non-Key Experts – Tasks and Minimum Qualifications

<p>1. Environmental Safeguards Specialist (ESS) - 1 person, Local</p>	<p>The ESS will be a full-time position over the duration of the construction period. With guidance from the SESS and RSS, the ESS will provide support to the Team Leader and the consultant team undertaking the Environmental activities including ensuring close communication with local authorities and local communities.</p> <p>Tasks:</p> <ol style="list-style-type: none"> 1) Establish and maintain close coordination with DPWT, local authorities, and local community and support the Team Leader and the consultant team implement the ES activities during supervision and monitoring, and conduct them under remote guidance of the SESS and SSRS when they are not on site; 2) Supervise the contractors' compliance to ESMPs / C-ESMPs and complete detailed action plan including environmental monitoring checklists prepared by the SESS; 3) Under the supervision of SES, design and implement training plan on ESMP and C-ESMP implementation, environmental awareness, and other aspects; 4) Review all documents and reports regarding the integration of environmental safeguards including the C-ESMPs and other contractor's environmental action plans; 5) Conduct a due diligence of the borrow pits proposed for use by contractor to ensure that the borrow pits meet requirements set out in the ESMPs; 6) Undertake audits, supervisions and/or inspections of any sites where the Contractor is undertaking activities related to the Works, to verify the Contractor's compliance with the C-ESMP requirements, with and without contractor and/or client relevant representatives, as necessary, but not less than once per month. ESS to monitor the Contractor's implementation of their C-ESMPs 	<p>Minimum qualifications as Environmental Safeguards Specialist:</p> <ul style="list-style-type: none"> • Degree in environmental sciences or equivalent; • Preferably 5 years' experience in conducting environmental impact assessments and implementation of environment mitigation plans and/or monitoring implementation of environmental mitigation measures during implementation of projects including highway projects funded by developing partners. • Knowledge on the IFI's (AIIB, EIB, AIIB) safeguard policies and relevant national legislation such as Ministry of Natural Resources and the Environment's (MONRE) Instructions on ESIA and IEE, 2016 • Ability to effectively communicate and produce reports and documents in Lao and English; • Organizational and interpersonal skill with cultural sensitivity; • Fluency in written and spoken Lao. • Fluency in written and spoken English is mandatory.
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	<p>via weekly inspections of the Contractors camps and work sites. Specific attention will be given to ensure safety of workers and local communities;</p> <p>7) Prepare monthly compliance reports; and</p> <p>8) Provide support to the SESS, SSRS, OHSS and Team leader and Senior Resident Engineer(s) to ensure compliance to the project ESMP requirements.</p>	
<p>2. Social Safeguards Specialist (SSS) – - 1 person, Local</p>	<p>The SSS will be a full-time position over the duration of the construction period. With guidance from the SESS and SSRS, the SSS will provide support to the Team Leader and the consultant team undertaking the SS activities including ensuring close communication with local authorities and local communities.</p> <p>Tasks:</p> <ol style="list-style-type: none"> 1) Establish and maintain close coordination with DPWT, local authorities, and local community and support the Team Leader and the consultant team implement the SS activities during supervision and monitoring, and conduct them under remote guidance of the SSSS and RSS when they are not on site; 2) Supervise the contractors' compliance to ESMPs / C-ESMPs and complete detailed action plan including social monitoring checklists prepared by the SSRS; 3) Under the supervision of SSRS, design and implement training plan on RP, EGEP, LMP and GRM implementation, and other SS aspects; 4) Review all documents and reports regarding the integration of social safeguard including the C-ESMPs and other contractor's social action plans as LMP; 5) Undertake audits, supervisions and/or inspections of any sites where the Contractor is undertaking activities related to the Works, to verify the Contractor's compliance with the C-ESMP requirements, with and without contractor and/or client relevant representatives, as necessary, but not less than once per month. 	<p>Minimum qualifications as Social Safeguards Specialist:</p> <ul style="list-style-type: none"> • Degree in Social sciences or equivalent; • Preferably 5 years' experience in conducting social impact assessments and implementation of social mitigation plans and/or monitoring implementation of social mitigation measures during implementation of projects including highway projects funded by developing partners. • Knowledge on the IFI's (AIIB, EIB, AIIB) safeguard policies and relevant national legislation such as instructions on resettlement and compensations. • Ability to effectively communicate and produce reports and documents in Lao and English; • Organizational and interpersonal skill with cultural sensitivity; • Fluency in written and spoken Lao. • Fluency in written and spoken English is mandatory.

	<p>SSS to monitor the Contractor’s implementation of their C-ESMPs via weekly inspections of the Contractors camps and work sites. Specific attention will be given to ensure safety of workers and local communities;</p> <p>6) Prepare monthly compliance reports; and</p> <p>7) Provide support to the SESS, RSS, SSRS, and OHSS, Team Leader and Senior Resident Engineer(s) to ensure compliance to the project ESMP requirements.</p>	
<p>3. Occupational Health and Safety Specialist (OHSS) – 1 person, local</p>	<p>The OHSS will be engaged on a full-time basis over the duration of the construction period.</p> <p>Tasks:</p> <ol style="list-style-type: none"> 1) Help prepare the Health and Safety Management Plans (HSMP) which forms part of the Contractors overarching C-ESMPs; 2) Perform tasks as described in Section E: Detailed Tasks but not limited to <i>Task 10: Review and Monitor Health and Safety Management Plans of the Contractor, and Task 11: Review the Emergency Procedures and Contingency Plan of the Contractor;</i> 3) Prepare health and safety monitoring checklists to ensure that the HSMP is implemented and maintained throughout the contract period; 4) Take care of all ESHS issues during construction works including conducting ESHS training and daily toolbox briefings to provide ESHS awareness; 5) In coordination with SESS and SSES, undertake audits, supervisions and/or inspections of any sites where the Contractor is undertaking activities related to the Works, to verify the Contractor’s compliance with the C-ESMP requirements, with and without contractor and/or client relevant representatives, as necessary, but not less than once per month. Specific attention will be given to ensure 	<p>Minimum qualifications as Occupational Health and Safety Specialist:</p> <ul style="list-style-type: none"> • A relevant, recognized OHS qualification, such as NEBOSH / IOSH / OSHA or other regionally recognized qualification or degree in occupational health and safety, public health or related field; • Preferably 5 years’ experience as an OHS practitioner during implementation of infrastructure projects including road/highway projects; • Experience in road projects funded by International Financial Institutions would be an advantage; • Fluency in written and spoken English is mandatory. • Ability to effectively communicate and produce reports and documents in English; • Organizational and interpersonal skill with cultural sensitivity.

	<p>compliance with the project Occupational and Community Health and Safety (OCHS) requirements;</p> <p>6) Review and advise the relevant persons (of the ISWS) on the OCHS risks and impacts of any design change proposals and the implications for compliance with ESIA, ESMP, consent/permits and other relevant project requirements;</p> <p>7) As part of the ISWS quarterly report, prepare Quarterly OCHS section providing a summary of the reporting periods monitoring checklists, incident and accident reports, non-compliance reports, training programs, etc; and</p> <p>8) Assist Team Leader on leading all OCHS accident/incident reporting, responding, investigation and monitoring.</p>	
<p>4. Structural Engineer (SE) –Part time</p>	<p>Services by the SE are to be provided in an intermittent manner throughout the final detailed design phase and during road rehabilitation phase. The SE will review design of new structures and bridges repair and make recommendations to DoR/MPWT the approval of the Final Detailed Design of structural works presented by the Contractor. In addition, the services will include: (i) Assist in optimizing the design of structures keeping climate change effects in mind; (ii) Consider strengthening the infrastructure design against natural hazards and impacts by climate change by e.g. incorporating bio-engineering methods; (iii) Review and evaluate hydrological and geotechnical reports and data and make appropriate technical recommendations; (iv) provide input to the preparation of Reports on relevant topics related to structures;</p>	<p>Minimum preferable qualifications as Structural Engineer:</p> <ul style="list-style-type: none"> • At least a B.Sc. in Civil Engineering • minimum 10 years of experience in the engineering field of road bridge design and must have a good all-round knowledge of road infrastructure. • experience in road bridge design which are exposed to natural hazards (mostly floods) and climate change. • good written and oral English communication skills.
<p>5. Laboratory Technician(LT) (1 person)</p>	<p>Tasks:</p> <ul style="list-style-type: none"> - The LT will be assigned to the monitor the laboratory testing (and related sampling) of materials, pavements, etc. He/she will verify that (i) the laboratory is sufficiently equipped for all required tests, (ii) that all equipment is calibrated as needed, (iii) that tests are carried out following the appropriate standard methods and the 	<p>Minimum preferable qualifications as Site Inspector:</p> <ul style="list-style-type: none"> • degree in civil engineering; • 5-year experience as the site inspector on road construction and/or maintenance projects;

	<p>requirements of the OPBRC Specifications, (iv) that tests and test results are appropriately recorded, (v) that samples are stored as per good engineering practice, (vi) that the program of tests is known to allow the participation of the employer’s representatives.</p>	<ul style="list-style-type: none"> • 2 assignments as the Site Inspector of road rehabilitation projects of asphalt concrete pavement; • Fluency in written and spoken Lao is mandatory • Fluency in written and spoken English is an advantage.
<p>6. Benefit and Monitoring Expert (BME) –Part time</p>	<p>Tasks: Under the overall direction of the Team Leader (TL), the BME will lead the benefit monitoring activities to ensure that economic analysis reports will be available for use during the mid- term review, and final completion of the rehabilitation works. The activities of this position include, but are not limited to, the following:</p> <ol style="list-style-type: none"> 1) Supervise the local Transport Economist in the visit to the project sections and lead discussions with MPWT staff and other partners, to obtain data necessary for the tasks, including clear definition of baseline parameters. The BME will coordinate the existing traffic volume data collection, to determine the annual average daily traffic (AADT) volumes, and forecast traffic volume growth; 2) Supervise the road deterioration and road user related data collection, to determine the economic and other indicators to use as appropriate input to the Highway Development and Management (HDM-4) model analysis; 3) Conduct economic analysis of the NR13SE road based on HDM-4 model, using the results of the engineering design and baseline data; and conduct risk and sensitivity analyses. 4) Adopt a life cycle cost and benefit approach, make an analysis to determine the economic benefits of the project. In case the final engineering design prepared by the Contractor differs from the engineering design used during the bidding process, review the economic analysis accordingly. The OPBRC contractual performance indicators (e.g., IRI in particular) should be considered in the analyses for NR13SE. 	<p>Minimum preferable qualifications as BME and transport economist:</p> <ul style="list-style-type: none"> • Bachelor degree in economics or civil engineering; • 8-year experience as an economist; • 2 assignments as the transport economist working in internationally-financed road construction projects; • Fluency in written and spoken Lao would be an advantage. • Fluency in written and spoken English is mandatory.

	<p>5) Draft a summary report outlining the issues, the proposed project, its inputs, outputs, outcome and impacts, and its budget and general implementation arrangements;</p> <p>6) Provide economic analysis reports, of satisfactory quality, at the beginning, midterm, and completion of the road rehabilitation and improvement works. The main text and appendixes of the final report should be in the format of an Implementation Completion and Results Report (ICR), related to the rehabilitation works.</p>	
7. Contract Specialist (CS) –Part time	<p>Tasks: Contract Specialist (CS) will provide intermittent services to PMU on contract management over consultation contract period, including</p> <ol style="list-style-type: none"> 1) Clarification and interpretation of OPBRC contract clauses 2) Review of requests for changes to be introduced in the OPBRC contract and drafting of contract amendments, if needed 3) If needed, triggering of dispute resolution mechanism included in the contract. 	<p>Minimum preferable qualifications as contract specialist:</p> <ul style="list-style-type: none"> • a degree in engineering or related discipline • minimum 10 years of overall experience • minimum 8 years on procurement of works and management of civil works contracts in more than one country. • minimum 5 years of experience on major highway projects funded by international lending agencies, involving performance-based contracting or similar forms of contract. • In-depth knowledge and experience in output and performance-based contracting (OPBRC) and/or Design and Build projects and in FIDIC conditions of contract, preparation of civil works bid documents, bid evaluation including evaluation of post-qualification application and analysis of rates are essential. • English language, writing, reading and speaking is mandatory.
8. Geotechnical Engineer	<p>Geotechnical Engineer will provide intermittent services during detail design and construction phases. GE will review the detail design, especially on landslide protection and data related to geotechnical and soil investigations for culverts and bridges. Aspects of natural hazards</p>	<p>Minimum preferable qualifications as Geotechnical Engineer:</p> <ul style="list-style-type: none"> • at least a B.Sc. in Civil Engineering or related area such as geophysics

<p>(GE) –Part time</p>	<p>and climate change will need to be considered in the geotechnical evaluation and recommendations to the design team. The Geotechnical/Soil Engineer will undertake the following tasks, but not limited to:</p> <ul style="list-style-type: none"> (i) Assist the Team Leader and the team, as required, in all matters related to geotechnical, soil and material related aspects (e.g. design, resilience to natural hazards, material quality, etc.); (ii) Provide clear recommendation on all issues related to subsoil and foundation engineering for bridges, culverts and earth retaining structures, stability of slopes and settlement, and pavement; (iii) Review contractors’ geotechnical reports and materials test reports and recommend approval/rejection; (vi) Review geotechnical aspects of contractors’ designs and recommend approval/rejection; (vii) Investigate sites and determine the stability of slopes; ensure that all part of the works that involve critical geotechnical conditions, such as embankments, excavations, slopes are analyzed carefully, and that designs for these are appropriate 	<ul style="list-style-type: none"> • minimum 10 years of experience in the field of geotechnical investigation in infrastructure projects. • Minimum 5 years on road infrastructure projects • good written and oral English communication skills.
<p>9. Benefits Monitoring Expert (BME-L) (local) –Part time</p>	<p>Tasks: Under the overall direction of the Team Leader (TL), and the international BME the Transport economist will support the benefit monitoring activities. The activities of this position include, but are not limited to, the following:</p> <ul style="list-style-type: none"> 1) Visit the project road sections and discuss with MPWT staff and development partners, etc. to obtain data necessary for the tasks, including clear definition of baseline parameters. Collect existing traffic volume data of recent years, to determine the annual average daily traffic (AADT) volumes, and forecast traffic volume growth; 2) Collect a set of basic road deterioration and road user related data, to determine the economic and other indicators to use as 	<p>Minimum preferable qualifications as BME and transport economist:</p> <ul style="list-style-type: none"> • Bachelor degree in economics or civil engineering; • 8-year experience as an economist; • 2 assignments as the transport economist working in internationally-financed road construction projects; • Fluency in written and spoken Lao would be an advantage. • Fluency in written and spoken English is mandatory.

	<p>appropriate input to the Highway Development and Management (HDM-4) model analysis;</p> <ol style="list-style-type: none">3) Support the BME in the economic analysis of the NR13SE road based on HDM-4 model, using the results of the engineering design and baseline data; and conduct risk and sensitivity analyses;4) Assist in the drafting of the summary reports outlining the issues, the proposed project, its inputs, outputs, outcome and impacts, and its budget and general implementation arrangements;5) Assist in the drafting of economic analysis reports, at the beginning, midterm, and completion of the road rehabilitation works.	
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K. Facilities to be provided by DoR/MPWT

- i) Full time Project Manager, under DoR, a single point of contact within the MPWT for all communications and requests, as well as a technical staff person designated by him/her for daily administrative or support needs;
- ii) Necessary project documents;
- iii) Assistance for international consultation experts to get visas, residence permits and other permits for the consultancy;
- iv) Permission for consultation experts to enter relevant offices and construction sites and, where needed, MPWT staff to cooperate with them;
- v) Consultation experts will be allowed to get all the data sources, project documents that are not-restricted and not containing proprietary and/or confidential information, reports, drawings and maps. For such access, the consultant experts will sign a Confidentiality Agreement for all information to remain confidential during the time of the Consultancy and for five years after the completion of the Consultancy.

L. Facilities to be provided by the Consulting Firm, the Consultant

- i) Office Space in Vientiane and the necessary furniture such as desks, chairs, tables, shelves; online/long distance meeting equipment and its accessory.
- ii) Office Space including meeting room on the construction sites including necessary furniture such as desks, chairs, tables, shelves;
- iii) The office equipment (computers, printers, internet, telephone, fax, photocopying equipment, binding machines, etc.);
- iv) Accommodation as needed to fulfill the consultancy assignment;
- v) Transportation as needed to fulfill the consultancy assignment;
- vi) All survey and measurements instruments;
- vii) All equipment and clothing, PPE, as required to fulfill the site duties;
- viii) The support staff;
- ix) Translation as required.
- x) All other facilities and supplies required to carry out the services.

M. Taxes, Duties, Income Taxes in Lao PDR

The consultant firm is responsible for Taxes, Duties, Income Taxes in according to Lao PDR's laws.

The Consultant, at time of submitting Expression of Interest (EOI) and/or, after being short listed, thereafter at time of preparing technical/financial proposals, are invited to seek information from the Ministry of Finance (MOF) on Taxes and Duties, Income Taxes, contract registration fee and any others that may be payable.