مجلس الإنماء والإعمار

بيروت - لبنان

(LONG VERSION WB AND CDR WEBSITES)

Lebanese Republic
Council for Development and Reconstruction (CDR)

Roads and Employment Project
World Bank - Loan Number 8705-LB
REQUEST FOR EXPRESSIONS OF INTEREST - EOI
(CONSULTING SERVICES– FIRMS SELECTION)

Assignment Title: Establishment of Road Asset Management System (RAMS) For Planning & Prioritizing Roads Maintenance Needs in Lebanon.

Reference No.: **FC014-**

The Lebanese Republic (hereinafter called "Borrower") has received US$ 200 million US Dollars, from the International Bank for Reconstruction and Development (IBRD) (the "Bank") in the form of a "loan" (hereinafter called "loan") toward the cost of the Roads and Employment Project. The Council for Development and Reconstruction (CDR), the implementing agency of the Government of Lebanon (Lebanese Republic), intends to apply a portion of the proceeds of this loan to eligible payments under the contract for which this Request for Expressions of Interest is issued. Eligible payments will be made by the Bank. Payments by the Bank will be made only at the request of the Lebanese Republic and upon approval by the Bank, and will be subject, in all respects, to the terms and conditions of the loan agreement.

The Roads and Employment Project comprises various components, including the **Establishment of Road Asset Management System (RAMS) For Planning & Prioritizing Roads Maintenance Needs in Lebanon** which, in its turn, includes various sections as shown in the attached Terms of Reference.

The objective of the assignment is the provision of consultancy services, training and procurement of goods relating to **the Establishment of Road Asset Management System (RAMS) For Planning & Prioritizing Roads Maintenance Needs in Lebanon.** Duties and responsibilities are described in the Terms of Reference of the consultancy services. The objective of the assignmnet is to improve the planning and implementation of maintenance works for the international, primary, secondary and tertiary road networks in Lebanon.

The CDR 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 short listing criteria are: (Consultants brochures, detailed description of similar assignments, proven experience in similar conditions, availability of appropriate skills among staff and so forth). **The Consultant is expected to have a sound knowledge of road asset management, data collection techniques, calibration and validation processes and relevant previous experiences in the subject matter. The Consultant shall present at least three (3) relevant and successful implemenation of projects in the last 10 years.** More details on the Consultancy Services are provided in the attached Terms of Reference.

Consultants may associate with other firms in the form of a joint venture (no more than 2 partners in a JV) or a sub Consultancy to enhance their qualifications. In case of a Joint Venture, the partners should have complementary experience with respective effort level for such assignment.

Shortlisted Consultants will be invited to submit their proposals, upon which a Consultant will be selected in accordance with the (QCBS) method set out in the "Procurement Regulations for IFP Borrowers", July 2016- Revision of November 2017.

Further information can be obtained at the address below during office hours (9:00 AM to 2:00 PM).

The Deadline for receiving EOIs is to be **16/07/2021** at 12:00 noon, Beirut local time.

Expressions of Interest must be delivered to the address below by hand or carrier. Consultants have to submit one original EOI and two copies.

Address:
Council for Development and Reconstruction (CDR)
Tenders Department
Tallet El Serail, Beirut Central District
Beirut - Lebanon
Telephone: (+961-01-980096)
Facsimile number: (+961-01-981255)

REPUBLIC OF LEBANON
Roads for Employment Project REP
Establishment of Road Asset Management System (RAMS)
For Planning & Prioritizing Roads Maintenance Needs in Lebanon

Terms of References (TORs)

A. Background

The Government of Lebanon (GoL) has received US$200 million from The World Bank-IBRD toward the cost of Roads and Employment Project REP, which will be implemented over 6-years starting from the effectiveness date of the Loan Agreement, October 30, 2018. The development objectives of the project are to: (i) Improve transport connectivity along select paved road sections; and (ii) Create short-term jobs for Lebanese and Syrian communities.

The World Bank funded project has the following components:

Component 1: Roads Rehabilitation and Maintenance aims at carrying out a program of activities to rehabilitate, upgrade and maintain selected primary, secondary and tertiary roads, including road safety and spot improvements to approximately 500 km of roads; Provision of Technical Assistance for the design, procurement and supervision of said Sub-projects and for preparation of Safeguards Instruments for the Project.

Component 2: Improving Road Emergency Response Capacity aims at improving the capacity of the Ministry of Public Works and Transport to deal with road emergency works, especially those induced by snow and climate extremes.

Component 3: Capacity Building and Implementation Support aims at, among other objectives, to build the capacity of the Lebanese agencies in the planning and management of the road sector, contribute to the training and capacity building of contractors and workers on new and improved road construction and maintenance techniques, finance consultancy services, and related software and IT equipment.

Implementation Unit (PIU) established within the Council for Development and Reconstruction (CDR) shall manage the Roads and Employment Project over the implementation period of the REP. The PIU shall be responsible for the management of project activities including the fiduciary operations, contract management and the administration of the project's funds.

Component 4: Support to farmers engaged in crop and livestock production which aims at supporting small farmers in facing the impacts of COVID-19 pandemic and the financial crisis that have threatened the overall food security of Lebanon. This Component will enable small-farmers to face the difficult economic situation as well as the COVID–19 pandemic repercussions by providing them with agricultural fertilizers, seeds, seedlings and feed for a variety of animals, through the Food and Agriculture Organization (FAO) the Implementing Agency for Component 4, and under the technical leadership of the Ministry of Agriculture (MOA).

B. Lebanon's Road Network and Condition (2017)

The road network in Lebanon is generally in poor condition due to years of underinvestment and inefficient spending. The Lebanese road network consists of a total of approximately 22,000 km of roads. The classified (or national) road network under the Ministry of Public Works responsibility consists of about 6,073.85 km of mostly paved roads classified as: i) International Roads (628,62 km), ii) Primary Roads (1,399.77 km), iii) Secondary Roads (1,024.31 km), iv) Local Roads (1761.75), and v) Unclassified Roads (1,259.41 km). The last pavement condition survey was conducted in 2017 by the University of Zagreb, Faulty of Transport and Traffic Sciences, on behalf of the CDR. Table 1 below shows the pavement condition of the aforementioned road segments which were investigated during this survey:

	Very Good (%)	Good (%)	Bad (%)	Poor (%)	Very Poor (%)	Total %
International	33.99	52.54	12.97	0.49	0.01	100
Primary	14.63	47.97	35.35	1.85	0.2	100
Secondary	7.44	47.21	43.17	2.02	0.16	100
Local	4.69	36.8	54.48	3.63	0.39	100
Unclassified	10.26	45.3	41.98	2.2	0.2	100

Table 1: Pavement condition of various roads 2017

C. Objectives

In view of the poor performance of road maintenance in Lebanon, the Government of Lebanon (GoL) intends to retain the services of a highly experienced Consulting firm to implement ***a Technical Assistance study to improve planning and implementation of maintenance works for the international, primary, secondary and tertiary road networks.***

MPWT is contemplating the setting up a RAMS-Unit, such unit will consist of RAMS-Unit's Team Leader, Civil/Road Engineers, Traffic Engineer and IT Specialist who will be also assisted by Transport Economist.

Under the RAMS, MPWT needs to ensure that appropriate data collection strategies are introduced, equipment calibration and validation is undertaken, regular checks on data quality are made and standards and well-documented procedures ensure data integrity is not compromised. It is also essential to ensure that the data collected is accurate and that the data is in a form that is easily usable. In addition, it is important to ensure that both the road characteristics (geometry, traffic, roughness, bearing capacity and pavement/surface condition) and the data collection methodologies adopted ensures the quality and integrity of the data collected before network analysis can be undertaken.

The RAMS project will also include the procurement, delivery, installation, maintenance and operation of computer equipment, GPS and GIS systems, hardware, and software, HDM4 and road data collection system for the duration of the study. At the end of the consultant's assignment, all equipment, software and hardware will be handed over to the MPWT. The list of equipment, software and hardware, including their technical specifications, warranty and after sale service will be part of the technical proposal of the consultant.

Training, capacity building and follow-up on RAMS-unit will be part of the TA study and will include RAMS concepts, road data collection, organization and analysis using HDM-4 to prepare different programs of road investments under different budget scenarios.

The RAMS-Unit to be established will be housed within the MPWT, and its key technical and support staff will be trained by the consultant as part of the on-the-job-training and will follow-up on the RAMS unit on a monthly basis to oversee the continuing development of the system. The RAMS-Unit intends to:

- Ensure a coordinated and cooperative approach from all national road agencies; the MPWT the responsible agency for the maintenance and operation of the road network in Lebanon;
- Establishing a data collection system for road assets inventory and condition survey of the classified road network in Lebanon;
- Improve the road management capabilities of the MPWT in the multi-year planning, programming, budgeting of the road maintenance activities.
- Identify possible funding sources for the annual road maintenance programs.

D. Scope of Work: for the Road Asset Management System RAMS (covered under this TOR)

RAMS will enable MPWT to determine the optimum maintenance works and rehabilitation treatments to be applied to each individual road or at network level. RAMS will serve as a tool to enable MPWT to make strategic decisions to set standards for maintenance management and to advise the effect on the network under differing funding and budget scenario.

The RAMP will include objectives and the approach to the development of the RAMP process, a description of the activities, which includes the scope of work, and the actors involved, followed by a detailed description of the methodology.

Task 1- Equipment and Staffing Requirements:

In order to establish a functioning RAMS in Lebanon, the Consultant is required to conduct a comprehensive review and assessment of the existing technical and institutional capabilities, noting that the MPTW does not have a RAMS infrastructure at present.

Based on the review and assessment of existing RAMS infrastructure, or lack of, the Consultant, in consultation with CDR and MPWT, will prepare an Action Plan for MPWT to set up and implement a Road Asset Management Plan (RAMP).

This Action Plan will consist on the below activities:

- Review and assessment of the current available vehicle and equipment, if any, and determine the vehicle and equipment requirements for a sustainable operation of the RAMS, including computer equipment, software and hardware, GIS & GPS systems and data collection equipment; noting that vehicles are available at the MPWT, however they require to be fitted out by relevant field equipment such as GPS (qty 1), HD camera (qty 1), roughometer (1 set), crack laser sensors (1 set), high resolution ODOmeter, in addition to some mobile field equipment such as video based traffic counters and classifier (1 set), mobile deflectometer (1 set) etc….

- Review of existing setup (Hardware and Software), evaluate the needs with special attention to the GIS software to be used based on the GIS platform and product develop the recommendations and implementation plan to update the current setup.
- Propose and procure the minimum required field equipment (as mentioned in the first bullet above) to kick-start the RAMS unit operation.
- Propose organization structure, staffing skills requirements and preparation of job descriptions and responsibilities;
- Annual operating costs of a newly established RAMS-Unit under the recommended organizational structure, RAMS-Unit terms of reference, staffing requirements and their tasks and duties as well as reporting requirements.

The RAMS-Unit to be established will be housed within the MPWT, and will be trained by the consultant as part of the on-the-job-training and will follow-up on the RAMS unit on a monthly basis to oversee the continuing development of the system.

In addition to the Action plan the Consultant shall be responsible of the ***Management Information System (MIS)*** that will include his recommendation for the acquisition of the computer and system requirements and accessories, including HDM4, to be procured by the Consultant under this TOR, to ensure proper control and performance in the programming, planning and budgeting of the MPWT.

The services of the consultant will also include the procurement, delivery, maintenance, security, licensing and warranty of computer systems software to cover LAN, HDM-4 (free of charge), GIS (open source geographic information system such as QGIS or similar (possible free of charge)), FMS (1 license/1 user), and backup systems and hardware as follow:

- Two floor stand computers: Core I7, 16GB RAM, 4GB GPU, 2TB SSD, 4TB HDD, DVD writer, 3x USB3.
- Four 24" screens 1920x1080.
- Backup system NAS dual disk 8TB each.
- Three UPS units 1500 watt.
- Basic Network system of 1GB Ethernet with 1GB 8 port switch.

Task 2 – Development of a GIS System for the Road Asset Management System (RAMS).

The Consultant work will include:

- Development of a GIS-Based Management System, using the procured hardware and software.
- Building GIS road database structure for existing road assets for all classified network (International, primary, secondary and tertiary roads) utilizing the existing data under iRAP platform;
- Developing a sustainable system for road maintenance plan;
- Creating database for capital investment and Planning;
- Building a tracking system for integrating new capital investment projects, as well as completed maintenance activities into the RAMP.

The Consultant shall conduct an on-the-job-training for the RAMS-Unit (consist of 5 persons: Team Leader, Civil/Road Engineers, Traffic Engineer, IT Specialist, Transport Economist) and/or the qualified counterparts nominated by the MPWT to introduce the developed GIS system, HDM-IV and all the above-mentioned scope under this task, for 10 working days.

Task 3: Pilot Project for International & Primary Roads.

Following the assessment, the Consultant shall conduct a pilot study of road maintenance needs for the International and Primary roads of approximately 2300 km (Refer to Annex 1). The pilot study will demonstrate inventory and the condition of the pilot roads, prioritize maintenance needs and develop detailed definitions, for road maintenance and rehabilitation works of the most critical sections (Fair and Poor).

The pilot survey data collection will include, but not limited to, a video recording of the selected network, and measuring of number of pavement condition and strength data.

In Addition to the above, data collection for the operation and maintenance of the newly established Road Asset Management System (RAMS) for the pilot study will include:

- Road construction and maintenance history and costs (where available);
- Pavement condition, including potholes, roughness, rutting, failures, etc.;
- Pavement structure, strength, defection etc.;
- Traffic data, including volume, composition, loading and extent of overloading;
- Maintenance treatment options and costs;
- Existing Road safety measures;
- Data handling, checking and analysis procedures;
- GIS maps of effected area, including topographical, hydrological, geological;
- Weather data for each road section (especially winter weather data - temperature and snowfall records).
- Current material and maintenance costs.
- Current design standards;
- Preparation and presentation of reports to cover general and specific requests.

Distance Measurement

Review of the road inventory data to ensure it clearly defines the road network.

- Assess the road location data, how routes are defined through the use of Location Reference Points (LRP's).
- Determine how the length each LRP is measured and the accuracy with which it is defined.
- Identify how these LRPs will be identified in the survey vehicle and what checks are made to ensure that each LRP is measured accurately.

All data shall be referenced by chainage and GIS maps and GPS coordinates.

Based on the collected road data under the pilot project as mentioned above, an integrated GIS road network evaluation shall be done by the Consultant using HDM-4, and 3-4 years rolling program of preservation works for different budget scenarios shall be prepared for monitoring, planning and programming purposes. In addition, the Consultant shall develop a sustainable road maintenance plan, treatment options and costs and improvement of road safety measures as part of the RAMS.

Also, the pilot study will produce the following documents tailored to Lebanon's conditions:

(i) Road reference system covering the highways and Primary road network;
(ii) Road database and systems Analysis;

(iii) Recommendation for system configuration and selection of users;
(iv) Road database structure;
(v) Guide on Road Data Collection and Management; and
(vi) Guide to Pavement Condition Survey and Evaluation.

In the course of conducting the pilot study, the Consultant shall provide on-the-job training to and follow-up on the RAMS-Unit (consist of 5 persons: Team Leader, Civil/Road Engineers, Traffic Engineer, IT Specialist, Transport Economist) to continue with the development of the system to include secondary and tertiary roads (around 4,200Km).

In order to ensure the accuracy and quality of the RAMS data, the consultant is also expected to prepare the following Procedures and guidelines for the RAMS unit:

1. Establish an equipment calibration procedure which will ensure all measuring and survey equipment have certification compatible with international standards.
2. The consultant should make guidelines and recommendations regarding the need for accuracy and frequency of the data collection, especially in the field of pavement condition inventory.

Task 4 - Routine Maintenance Management System (RMMS)

In addition to the above, the Consultant shall develop a manual for RMMS with the main objective to improve the efficiency and management of the routine maintenance to be undertaken by the MPWT. The RMMR will assist to obtain better value from the available funds and existing resources for the annual routine maintenance and rehabilitation of the road network in Lebanon.

The RMMS will provide:

- A standard approach to routine maintenance work programming and budgeting; including road condition, traffic level, balancing of roads between regions and communities, road categories and classes and the job creation potential and socioeconomic impacts;
- Condition targets and intervention levels for maintenance of the road network as required by the MPWT to suit funding constraints;
- Road defect inspection requirements;
- Requirements for formalized work practices for routine maintenance activities; the means to plan and measure Level of Service (LOS) gains;
- The ability to compare the performance of different contractors to measure efficiency, effectiveness and needs for improved work principles and training;
- The means to quickly identify items costing above expectations.

Task 5- Typical Performance-Based Maintenance Contract.

At the end, the Consultant shall prepare and develop a typical Performance-Based Maintenance Contract to be used by MPWT for future routine maintenance works.

E. Consultant's Key Experts

The Consultant will be responsible for the overall management of the services, distribution of tasks and performance of activities. The responsible person will be the Consultant's Team Leader who will represent the Consultant in front of the client (MPWT/CDR).

K1-Road Maintenance Specialist, Team Leader: University degree in civil engineering, at least 15-years of professional experience, at least 5-years of experience in maintenance management. Fluency in English language, both written and spoken; knowledge of Arabic language and experience in similar countries would be a plus.

K2-Road Survey Expert: University degree in civil engineering, at least 15-years of professional experience and at least 10 years of experience in road survey activities covering the whole spectrum of road inventory. Fluency in English and Arabic languages, both written and spoken, experience in similar countries would be a plus.

K3-Computer and MIS Specialist: University degree in Computer Science, at least 15-years of professional experience and at least 5-years of experience in computer and MIS technologies covering operations of information systems and data processing activities. He/she will be responsible for determining the RAMS computer hardware and software requirements as well as installation and operation of the RAMS. Fluency in English and Arabic languages, both written and spoken, experience in similar countries would be a plus.

Support staff and Knowledge Transfer: The Consultant may propose additional experts if deemed necessary to perform the services. To ensure effective implementation of the services, the Consultant should engage, to the extent possible, local staff such as technical support staff and engineers, office manager, technical secretary, driver(s) and translator/interpreter.

The number of local support staff and their qualifications to be determined by the Consultant as well as the needs for such support. All costs associated with the engagement of the local support staff will be covered by the Consultant and must be included in the fee rates of experts. It is the responsibility of the Consultant to optimize the deployment plan of its team members within the time frame for the services.

During implementing the TA services, the Consultant will conduct a series of training sessions, capacity building and knowledge transfer measures to the RAMS-Unit (consist of 5 persons: Team Leader, Civil/Road Engineers, Traffic Engineer, IT Specialist, Transport Economist) and a number of engineers and technicians of MPWT (up to 5 trainees) on the concept, usage and implementation of RAMS. The number of trainees and the scope of the training sessions will be agreed with the CDR at the inception stage of the TA.

F. Reporting Requirements and Payment Schedule

The Consultant will submit the following deliverables and reports, in English and Arabic languages, in one original electronic copy and 2 hard bound copies of each:
The Consultant shall prepare and submit reports described in this section. All reports shall be prepared in English and Arabic languages. In addition, electronic version of each report, in an open format ready for editing, will be submitted, and 2 (two) hard bound copies of each below submittals:
Task 1 Deliverables:

- **Deliverable 1.1: Action plan Report** (Due in 4 weeks from the Notice to Commence (NTC)).
  At the end of task 1 (Equipment & Staffing Requirements), and Based on his review and assessment the Consultant shall provide an Action plan for MPWT to set up and implement a Road Asset Management Plan RAMP.
- **Deliverable 1.2: Management Information System (MIS) Report** (Due in 4 weeks from the Notice to Commence (NTC)).
  At the end of task 1 (Equipment & Staffing Requirements), and in addition to the Action plan the Consultant shall develop a Management Information System (MIS) Report that shall include his recommendation for the acquisition of the computer and system requirements and accessories, including HDM4, to be procured by the Consultant under this TOR, and to ensure proper control and performance in the programming, planning and budgeting of the MPWT.
- **Deliverable 1.3: Acquisition and delivery of needed filed equipment, hardware and software for the GIS.** (Due in 6 weeks from the Notice to Commence (NTC)).
  The consultant work will also include the procurement, delivery, maintenance, security, licensing and warranty of computer systems software to cover LAN, HDM-4 (free of charge), GIS (open source geographic information system such as QGIS or similar (possible free of charge)), FMS (1 license/1 user), and backup systems and Hardware are as follow:
  - Two floor stand computers: Core I7, 16GB RAM, 4GB GPU, 2TB SSD, 4TB HDD, DVD writer, 3x USB3.
  - Four 24" screens 1920x1080.
  - Backup system NAS dual disk 8TB each.
  - Three UPS units 1500 watt.
  - Basic Network system of 1GB Ethernet with 1GB 8 port switch.

  In addition to the above, the Consultant shall propose and procure the minimum required field equipment such as such as GPS (qty 1), HD camera (qty 1), roughometer (1 set), crack laser sensors (1 set), high resolution ODOmeter, in addition to some mobile field equipment such as video based traffic counters and classifier (1 set), mobile deflectometer (1 set) etc….

Task 2 Deliverables:

- **Deliverable 2.1: Development of a GIS & HDM-IV Systems for RAMS.** (Due in 10 weeks from the Notice to Commence (NTC)).
  At the start of task 2 the Consultant shall install (hardware & software) the GIS and HDM-IV systems at location indicated by MPWT and shall be responsible of System development & integration.

- **Deliverable 2.2- Training Report.** (Due in 12 weeks from the NTC).
  The Consultant shall conduct an on-the-job-training for the RAMS-Unit and/or the qualified counterparts nominated by the MPWT to introduce the developed GIS system, HDM-IV and all the above-mentioned scope under task 2, for 10 working days. At the end of the Training, the Consultant shall submit a training report.

Task 3-Deliverables:

- **Deliverable 3.1-Pilot Project for International & Primary Roads.** (Due in 22 weeks from the NTC).
  At the end of task 3, and based on the collected road data under the pilot project, an integrated GIS road network evaluation shall be done by the Consultant using HDM-4, and 3-4 years rolling program of preservation works for different budget scenarios shall be prepared for monitoring, planning and programming purposes. In addition, the Consultant shall develop a sustainable road maintenance plan, treatment options and costs and improvement of road safety measures as part of the RAMS.

  Also, the pilot study will produce the following documents tailored to Lebanon's conditions:
  - Road reference system covering the highways and Primary road network;
  - Road database and systems Analysis;
  - Recommendation for system configuration and selection of users;
  - Road database structure;
  - Guide on Road Data Collection and Management; and
  - Guide to Pavement Condition Survey and Evaluation.

  In addition to the above and in order to ensure the accuracy and quality of the RAMS data, the consultant is also expected to prepare the following procedures and guidelines for the RAMS unit:

  - An equipment calibration procedure which will ensure all measuring and survey equipment have certification compatible with international standards.
  - Guidelines and recommendations regarding the need for accuracy and frequency of the data collection, especially in the field of pavement condition inventory.

- **Deliverable 3.2- Training Report.** (Due in 24 weeks from the NTC).
  In the course of conducting the pilot study, the Consultant shall provide on-the-job training to and follow-up on the RAMS-Unit for minimum 10 working days, to continue with the development of the system to include secondary and tertiary roads. At the end of the Training, the Consultant shall submit a training report.

Task 4 – Deliverable:

- **Deliverable 4.1: Routine Maintenance Management System (RMMS)** (Due in 26 weeks from the NTC).

  At the end of task 4, the Consultant shall develop a manual for RMMS with the main objective to improve the efficiency and management of the routine maintenance to be undertaken by the MPWT. The RMMS will assist to obtain better value from the available funds and existing resources for the annual routine maintenance and rehabilitation of the road network in Lebanon.

Task 5- Deliverable

- **Deliverable 5.1 Typical Performance-Based Maintenance Contract.** (Due in 30 weeks from the NTC).

  At the end, the Consultant shall prepare and develop a typical Performance-Based Maintenance Contract to be used by MPWT for future routine maintenance works.

Deliverables	Payment Due
Task 1	
Deliverable 1.1: Action plan Report	Upon Approval by the Client
Deliverable 1.2: Management Information System (MIS) Report	Upon Approval by the Client
Deliverable 1.3: Acquisition and delivery of needed hardware for the GIS	Upon delivery and installation at location indicated by MPWT
Task 2	
Deliverable 2.1: Development of a GIS System for RAMS	Upon successful completion of the task.
Deliverable 2.2- Training Report	Upon successful completion of the task.
Task 3	
Deliverable 3.1-Pilot Project for International & Primary Roads	Upon successful completion of the task.
Deliverable 3.2- Training Report.	Upon successful completion of the task.
Task 4	
Deliverable 4.1: Routine Maintenance Management System (RMMS)	Upon Approval by the Client
Task 5	
Deliverable 5.1 Typical Performance-Based Maintenance Contract.	Upon Approval by the Client

G. Services to be provided by client, (MPWT/CDR)

The MPWT/CDR will provide all possible assistance, documents and information as may be reasonably requested by the Consultant to carry out its obligations. The client will be responsible for provision of the following:

- Copies of current standard contracts for road maintenance and technical specifications;
- Access to current road management systems and procedures for road maintenance management and their duties and responsibilities;
- Reports related to the implementation of road maintenance activities.

All documents so provided are and will remain the property of the MPWT/CDR. The Consultant may not dispose of or otherwise make use of such documents without the prior written approval of the client. The Consultant shall be fully responsible for the interpretation and use of those documents and studies.

H. Services to be provided by the Consultant

The Consultant shall be responsible to provide and maintain fully equipped office space in Beirut, Lebanon, including all necessary office facilities, residential accommodation, local transportation, personal computers and other information technology equipment, specific technical and road survey equipment, reproduction, copying, training workshops, postal and communication services, translation services, etc., that may be required for performance of the services, but on its own cost. International fares to and from Beirut and translation services shall be borne by the Consultant.

The Consultant shall be responsible for duties and taxes payable under the Lebanese laws. The Consultant shall be entirely responsible for all taxes, duties, license fees and other such levies imposed outside Lebanon.

I. Work methodology

The Consultant shall identify all risks that may compromise the successful completion of the services and prepare risk management plan to mitigate potential risks. In performing all the tasks described in these TORs, the Consultant is expected to work closely with the MPWT/CDR staff to ensure the successful implementation and completion of the services.

J. Commencement and Duration

The expected duration of the services under this ToR is thirteen (30) weeks from the Notice to Commence.

Annex 1: International and Primary roads

Legend

Primary Roads

Secondary Roads