No. 3043 /22/D-12/MPRRDA/2019 Bhopal, Dated: 08/03/2019

Invitation for expression of interest

E.O.I. is invited for engagement of a Road Asset Management specialist to assess the gap between rural road network management unit (RRNMU) in use by MADHYA PRADESH RURAL ROAD DEVELOPMENT AUTHORITY (MPRRDA) and Road Asset Management system (RAMS) as proposed by World Bank under Madhya Pradesh rural road connectivity project (MPRCP)

Objective of consultancy services for RAMS is;

1. To review the business process, applications, and products of the existing RRNMU and e-MARG and indentify gaps and areas of improvement of the system and business processes related to the use of RAMS.
2. The consultant will also assess capacity of the unit administering the existing RAMS and identify capacity strengthening needs.
3. Based on the findings of the review and in consultation with MPRRDA the consultant will assist MPRCP implementation unit in drafting a TOR/RFP for upgrading the RAMS and developing commensurate system administration capability.
4. A pre-bid meeting will be held at 11.30 hrs. on 02.04.2019 at MPRRDA Hqrs. Paryawas Bhawan, Bhopal.

Detailed E.O.I. & Term of reference will be available on the website www.mprrda.com from 17.00 hrs on 13.03.2019.

Chief General Manager (T & e-G)
M.P. Rural Road Development Authority,
Bhopal
DETAILED REQUEST FOR EXPRESSIONS OF INTEREST
For
(CONSULTING SERVICES – INDIVIDUAL SELECTION)

INDIA
Madhya Pradesh Rural Connectivity Project
Loan No: 8833-IN

Assignment Title: “ROAD ASSET MANAGEMENT SPECIALIST TO ASSESS THE GAP BETWEEN RURAL ROAD NETWORK MANAGEMENT UNIT (RRNEMU) IN USE BY MADHYA PRADESH RURAL ROAD DEVELOPMENT AUTHORITY (MPRRDA) AND ROAD ASSET MANAGEMENT SYSTEM (RAMS) AS PROPOSED BY WORLD BANK UNDER MADHYA PRADESH RURAL ROAD CONNECTIVITY PROJECT (MPRCP)”

Reference No. (As per Procurement Plan): __________________

1. The Government of India has received financing from the World Bank toward the cost of the Madhya Pradesh Rural Connectivity Project, and intends to apply part of the proceeds for consulting services.

A consultancy service is to review the business process, applications, and products of the existing RRNEMU and e-MARG and identify gaps and areas of improvement of the system and business processes related to the use of RAMS.

The expected duration of this project including 04 months of operation. The broad scope of services will include but not limited to required expertise in design, development & implementation or operationalization of Web-GIS based road asset management systems and pavement management systems including configuration of COTS, expertise and through acquaintance with GPS & GIS related data collection methods including automatic data acquisition system, data interpretation, data integration to widely accepted economic tool such as HDM-4 or equivalent tool.
2. **Objectives of the Consultancy Services for RAMS:**

   - The objective of the consultancy services is to review the business process, applications, and products of the existing RRNMU and e-MARG and identify gaps and areas of improvement of the system and business processes related to the use of RAMS.
   - The consultant will also assess capacity of the unit administering the existing RAMS and identify capacity strengthening needs.
   - Based on the findings of the review and in consultation with MPRRDA the consultant will assist MPRCP implementation unit in drafting a TOR/RFP for upgrading the RAMS and developing commensurate system administration capability.

3. The Project Director, MPRCP, now invites eligible Consulting Individual (“Consultant”) 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:

   1. The Individual should demonstrate that they have experience in consulting engagement on Road Asset Management Projects including development of RAMS strategy, action plan, institutional strengthening etc; in last 5 years;
   2. The Individual should demonstrate experience in design, development, testing implementation, maintenance and project management of RAMS or similar system in the last 5 years.
   3. The Individual should demonstrate its ability to work with and coordinate between multiple stakeholders towards achieving common goals and objectives.
   4. Experience in handling externally aided projects with the World Bank/ADB and/or other multilateral financing agencies will be an advantage.

4. **Expressions of Interest** (limited to 20 pages) must include:
   - Introductory letter on letter head (with complete contact details – name of contact person, mailing address, telephone, fax, email etc.) explaining how the Individual is best positioned to deliver the tasks.
   - Individual profile.
• Short note on the similar projects implemented by the Individual pertaining to the short listing criteria along with the contact details of past clients;
• The EOI should contain sufficient supporting documents to substantiate the claim of the Consultant towards their qualification. Comments on Sample Terms of Reference (ToR).

5. The attention of interested consultants is drawn to paragraph 1.9 of the World Bank’s Guidelines: Selection and Employment of Consultants (under IBRD Loans and IDA Credits and Grants) by World Bank Borrowers January 2011 updated July 2014 (“Consultant Guidelines”) setting forth the World Bank’s policy on conflict of interest.

6. A pre-bid meeting will be held on **02 April 2019 at 11.30 AM** at in address given below with the Consultants or their authorized representatives to clarify issues and to answer questions on any matter that may be raised at that stage.

7. Further information can be obtained at the address given below during office hours i.e. **10:30 AM to 5:30 PM upto 01 April 2019**.

8. Expressions of Interest must be delivered in the written form either by courier/speed post or by email to the address below on or before **16th April 2019 by 15:00 hours**.

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Chief General Manager (T & e-G)
M.P. Rural Road Development Authority,
Bhopal

(Pankaj Jhawar)
Project Director, MPRCP
MP Rural Road Development Authority
Block-II\(^{nd}\), 5\(^{th}\) Floor, Paryavas Bhavan,
Bhopal M.P.-462011
Tel: +91 755 2570129
E-mail: mprcp@rediffmail.com
End No. 3044/22/D-12/MPRRDA/2019

Bhopal Dated 08/03/2019

Copy to:

1. Secretary, Public Works Departments / Agriculture Department / Finance Department Mantralaya Bhopal
2. Commissioners Public Relation, Ban Ganga Bhopal.
3. Engineer in Chief Public Works Departments, Satpura Bhawan, Bhopal.
4. Engineer in Chief Madhya Pradesh Rural Road Development Authority Bhopal.
5. Chief Engineer, Public Works Departments, Jabalpur/ Gwalior / Indore/ Bhopal /National Highway / Bridge.
7. Chief Engineer, Central Public Works Departments, E-3/4B Arera Colony Bhopal.
8. All Divisional Commissioners
9. All Collectors
10. Chief Executive Officers, Zilla Panchayat (all).
11. Chief General Manager, MPRRDA, (all).
12. General Manager Programme Implementation Units (all).
13. Manager (IT), MPRRDA, Bhopal.

Chief General Manager (T & e-G)
M.P. Rural Road Development Authority,
Bhopal
Terms of Reference

FOR

A ROAD ASSET MANAGEMENT SPECIALIST TO ASSESS THE ROAD ASSET MANAGEMENT SYSTEM (RAMS) IN USE BY MADHYA PRADESH RRDA (RRNMU)

UNDER

MP RURAL ROAD CONNECTIVITY PROJECT (MPRCP)

I. INTRODUCTION:

1. The Govt. of Madhya Pradesh (India) has applied for the financial assistance from the World Bank to upgrade 10,000 km rural roads of gravel standards constructed under CMGSY to bituminous surface standards and construction of 510 km new road to provide alternate connectivity and improve network quality to villages of high economy potential. The total cost of MPRCP is US $ 502 million. The Madhya Pradesh Rural Connectivity Project seeks to;

   (i) Upgrade 10,000 Km of rural roads of gravel road standards constructed under CMGSY to bituminous standards to improve network quality and connectivity.

   (ii) Construct new rural roads to provide alternate connectivity to villages of high economic potential.

   (iii) Institutional strengthening which includes improvement of e-based project management system, Road Accident Data Management System, modernization of maintenance and skill development.

A sustainable Road Asset Management System (RAMS) needs to be developed, under institutional development Component (B1) of the MPRCP. Component B1 under MPRCP provides systematic process of maintaining, upgrading and operating assets, combining engineering principles with sound business practice and economic rationale, and providing tools to facilitate a more organized and flexible approach to making decisions.

The RAMS will store complete inventory of the road network with all its elements, the current condition and performance of the road network, an estimate of the value of the asset, a forecast of future demand of traffic and service needs, an estimate of the maintenance needs and cost, a prioritization of the quality and performance objectives, funding scenarios for the regular and timely maintenance and upgrade of the road asset, the definition of a strategy for the maintenance of rural roads and its implementation. Presently, MPRRDA is using Rural Road Network Management Unit (RRNMU) concept and e-MARG software for Asset Management. MPRRDA intends to engage an individual consultant to undertake a comprehensive study of the
4 gaps between component B1 of MPRCP and current system(s) and processes being used by MPRRDA and provide actionable recommendations on how to address those gaps.

II. IMPLEMENTATION ARRANGEMENT:

2. The Madhya Pradesh Rural Road Development Authority (MPRRDA) hereinafter called the Client is the Implementing Agency for the project. A dedicated Project Management Unit (PMU) has been established in MPRRDA headquarters, headed by a Project Director and supported by other staff.

3. MPRRDA proposes to engage an individual consultant to study the gaps between B1 component of MPRCP and present system(s) and business processes being used by MPRRDA the consultant is expected to provide high quality management and implementation support by working as an integral part of the PMU. It has to be recognized that the Consultant will generally not have a direct role to implement the project, except that is required in delivering the TOR for upgrade or renewal of the current system(s) and processes.

4. The consultant will be selected in accordance with the procedures set out in the World Bank’s Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers (Jan 2011 – updated in July 2014)

III. OBJECTIVES OF THE CONSULTANCY SERVICES

5. The objective of the consultancy services is to review the business process, applications, and products of the existing RRNMU and e-MARG and identify gaps and areas of improvement of the system and business processes related to the use of RAMS The consultant will also assess capacity of the unit administering the existing RAMS and identify capacity strengthening needs. Based on the findings of the review and in consultation with MPRRDA the consultant will assist MPRCP implementation unit in drafting a TOR/RFP for upgrading the RAMS and developing commensurate system administration capability.

IV. SCOPE OF THE SERVICES

6. The scope of the services includes but not limited to the following:

   (i) Conduct a situational analysis, current business process mapping, organizational structure and technical and managerial capabilities of existing RRNMUs and e-MARG software currently in-use in context of the Road Asset Management System;
   
   (ii) Assessing whether the existing system(s)satisfy all the functional requirements a full-fledged RAMS including key components such as GIS based asset locational referencing system and base map for managing all road related assets, road information system, pavements management system, bridge information
management system (including structures and culverts), routine maintenance management system or annual maintenance planning tool, right-of-way information system (including road signs, road furniture and right of way land etc.) and traffic information system and identify the gaps by conduct Need Analysis and review the current decision-making process related to maintenance, rehabilitation and construction of all road assets;

(iii) Mapping all current business processes and documenting Standard Operating procedures (SOPs) related to the use of RRNMU system(s) and e-MARG in the context of Road asset management. The Consultant will also maintain an inventory of all existing user manuals and system user documents;

(iv) Providing recommendation on what is missing and suggest the development of the missing functional requirements (modules) to satisfy the “To-Be” scenario aimed at enhancing decision making and ensuring considerations for long-term impacts and sustainability of the asset value;

(v) Based on the need analysis, recommend options for “Upgrade of existing systems” with cost-benefit analysis

(vi) Presenting options for “Refresh through fresh deployment of hardware and software” with cost-benefit analysis. In both scenarios, the Consultant is expected to emphasize the need for ensuring sustainability of the proposed “To-Be” solutions.

(vii) Assessing the State Road Network to be administered by the RAMS and confirming whether all the classified roads are captured by the GIS-based inventory.

(viii) Providing recommendation on additional inventory needs;

(ix) Assess the adequacy of the data collection equipment and scope and frequency of data collection. The consultant shall also assess the use of common apps for data collection;

(x) Assess the adequacy of the data storage and computing capacity of the existing system(s).

(xi) Once the functional requirements gap analysis and inventory completeness is carried out, the consultant shall check if the user(s) of the current RAMS is generating prioritized investment and maintenance plans;

(xii) If the current RAMS is not used as a planning tool (generating prioritized investment and maintenance plan), the consultant shall provide recommendation on generating HDM (or other appropriate road planning and management tool) based prioritized investment and maintenance plan;

(xiii) Assessing the business process and propose process re-engineering together with change management strategy, as agreed by the Client;

(xiv) Assessing the capacity of the RAMS host unit and identify human capital building and IT capacity strengthening needs;

(xv) Finally, preparing draft TOR/RFP for engaging a downstream consultancy firm for the upgrading of existing RAMS; generating prioritized investment and maintenance plan; additional data collection equipment requirements; additional IT equipment requirements and assessing the option of cloud computing; and TA and capacity building tasks to be carried out by the consultancy firm. The change-management strategy could be part of the TOR if agreed by the Client.

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DURATION OF CONSULTANTS INPUT AND FACILITY BY THE CLIENT

The total duration of the service is 4 calendar months. This is an individual consultant services.

The Consultant should have the required expertise in design, development & implementation or operationalization of Web-GIS based road asset management systems and pavement management systems including configuration of COTS, expertise and through acquaintance with GPS & GIS related data collection methods including automatic data acquisition system, data interpretation, data integration to widely accepted economic tool such as HDM-4 or equivalent tool. The candidate should be a graduate in Civil Engineering with desirable post graduate specialization in the field of either Transport Economics / Transportation or Pavement Engineering / Transport Planning/ Geospatial Technology with Remote Sensing or Geophysics with a minimum of 15 years professional experience, including 5 years on similar projects. He/ She will have a proven track record of similar experience in India and overseas.

V. FACILITIES AND SERVICES TO BE PROVIDED BY THE CLIENT

7. The Consultant will work and report to PMU and Client will provide access to the required information and other assistance as required to effectively undertake the assignment. This includes access to the consultant to the office of MPRRDA and PIU offices, access to existing system in use under MPRRDA, record and documents relevant to the project, other surveys and investigation facilities available with the Client.

VI. REPORTING REQUIREMENT

Suggested text here:

1. The consultant shall provide an inception report within two weeks of the commencement of the services
2. The consultant shall provide an interim report within 6 weeks of the commencement of the services
3. The consultant shall provide a final report within 12 weeks of the commencement of the services
4. The consultant shall also provide TOR for engaging a consultancy firm for the system upgrading, propose change management strategy, support with the procurement of additional software and equipment, supporting with operationalization of the upgraded RAMS and training, with the final report.
# Reporting Requirements

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<tr>
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<th>Deliverable</th>
<th>Schedule</th>
<th>Format</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>1</td>
<td>The consultant shall provide an inception report</td>
<td>15 days</td>
<td>Two (2) hard copies in English and a Electronic copy in CD form.</td>
<td>The report will summarized the work performed during the reported period, identifying the problems encountered and indicating the corrected action taken or recommended</td>
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<td>2</td>
<td>The consultant shall provide an interim report on Situation and Gap Analysis with documentation of all “AS-IS” business processes, SOPs, and Systems.</td>
<td>1.5 Months</td>
<td>A presentation/discussion of recommendations and options to the Client.</td>
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<td>3</td>
<td>Consultant shall provide draft report and present recommendations and cost-benefit analyses for “To-Be” scenarios.</td>
<td>2.5 Months</td>
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<td>4</td>
<td>The consultant shall provide a final report</td>
<td>3 Months</td>
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<td>5</td>
<td>The consultant shall provide TOR for engaging a consultancy firm for the system upgrading, propose change management strategy, support with the procurement of additional software and equipment, supporting with operationalization of the upgraded RAMS and training, with the final report.</td>
<td>4 Months</td>
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