

**REQUEST FOR EXPRESSIONS OF INTEREST
(CONSULTING SERVICES – FIRMS SELECTION)**

THE STATE OF GUJARAT- INDIA

SECOND GUJARAT STATE HIGHWAY PROJECT (GSHP- II)

Loan No.: 8313- IN

Assignment Title: **Consultancy Services to Develop and Implement a Sustainable Web-based Gujarat Road Asset Management System for R&BD (GujRAMS), Government of Gujarat, Gandhinagar**

Reference No.: 01 of 2017-18

This request for Expressions of Interest (EOI) follows the general procurement notice for this project that appeared in United Nations Development Business, Date 24/01/2013 .

The Government of Gujarat (GoG) has received a loan from International Bank for Reconstruction and Development (IBRD) towards the cost of Second Gujarat State Highway Project (GSHP -II), and it intends to apply part of the proceeds of this loan for “**Consultancy Services to Develop and Implement a Sustainable Web-based Gujarat Road Asset Management System for R&BD (GujRAMS), Government of Gujarat, Gandhinagar**”.

The objective of the proposed Web-based Gujarat Road Asset Management System (GujRAMS) is to improve and implement a sustainable methodology for data collection on the road network and structures; set up application to support input of data via web/mobile and hosting of the system at a secured centralized facility at Gujarat State Data Centre (GSDC) or as directed by R&BD-GOG; use tools in the application to identify, evaluate, select, and prioritize road/bridge works; and disseminate road/bridge information within the department and to the public using modern technology and best practices suitable for Gujarat R&BD.

Project Outline

Gujarat R&BD intends to setup a sustainable GujRAMS, precisely web-based one, to manage all road assets on its road network in an efficient and effective manner. The entire process of software development and data collection for the system will be carried out in two phases by two separate consultants/agencies. Phase 1 will have two parts; Part 1 will include development of application software and tools necessary for GujRAMS; finalization of data collection methodology and format/forms for data collection; and testing on a pilot project of about 2500 km of roads (including State Highways (SH), Major District Roads (MDR), Other District Roads (ODR) and Village Road (VR)) to ensure its adequacy and practicability. Part 2 will comprise services related to coordination of data collection, preparation of plans and reports, and system maintenance and upgrade, described later (Item c below in the scope of work), for a further period of three (3) years. Phase-II is envisaged as data collection on the remaining network of about 15000 km of SH, MDR and ODR to be done separately by R&BD either by itself or through a data collection agency using the methodology and format/forms finalized by this Consultant.

The request for Expressions of Interest (EOI) herein refers only to the services required from the Consultant for Phase-1 that includes **Parts 1 and 2** described above. The scope of work defined in this request for Expressions of Interest (EOI) is as follows:

- a. **GujRAMS Software:** Set up a web-GIS based application to define Gujarat R&BD road network database with traffic and socio-economic data, inventory and condition of assets, including pavements, culverts/bridges with appropriate tools for managing GIS based network data. The GujRAMS will also allow storing of location and other data related to facilities within the right of way relevant to road safety, and corridor and utility management. The web-GIS based application will have appropriate modern data reporting tools such as dashboard for dynamic reporting, road chart, theme-based interactive GIS maps, and mobile application. The software will allow monitoring of the performance

of ongoing and completed works using selected parameters. It should also allow community participation through innovative technology, such as mobile application, and to eventually disseminate information related to road condition, traffic, works etc. to the public.

The web-GIS based application will have appropriate analytical tools, to be designed and implemented by the Consultant, for maintenance, preservation, rehabilitation and upgrading of the network and for prioritization and optimization of works for different funding levels. The application will also have the capability to indicate the necessary funding required to maintain the network at a given service level and the consequences of various funding levels on the health of the network. The GujRAMS analytical tools should predict the future asset condition and value, agency/user costs for maintenance/improvement/upgrading treatment alternatives and evaluate them using measurable economic and engineering parameters to be decided in discussion with R&BD during the project. Using these parameters, GujRAMS will have the facility to prioritize a list of candidate sections requiring detail project evaluation and allocation of resources from the budget. The system will be able to prepare a short term (1-3 year) program and a long-term (10-year) plan.

The Consultant will design, develop and test the GujRAMS using the data collected on the pilot project, and demonstrate its suitability and compatibility based on the agreed upon parameters. After successful testing and user acceptance the Consultant will migrate the application along with the additional data (to be collected either by R&BD or through a separate agency) on the remaining road network to the infrastructure of Gujarat State Data Centre (GSDC) or as directed by R&BD-GOG to roll out the GujRAMS for the entire R&BD.

- b. **Data Collection:** The project involves collection of spatial data for roads, bridges, culverts and other features within the R-o-W for an inventory of R&BD assets; condition data including roughness, structure/strength of pavement; bridge and culvert inspection/condition using modern data collection methods. Historical data on road works and traffic volume count data will be collected from R&BD offices and a database of existing road asset management tool (called GRMS). Some data on road safety, environment, and social impact will also be collected. Road/pavement data will be collected using automated equipment including high-resolution R-o-W images and video to improve the quality and reliability of data.

The Consultant will collect data on a pilot project of about 2500 km (SH, MDR, ODR and VR) using a set of data forms designed for this purpose. The methodology and data collection forms should be updated/modified by the Consultant to make these more efficient and effective to collect data for the remaining network for about 15000 km through a separate data collection agency. The Consultant will also finalize the ToR for the data collection effort (to be done either by R&BD or accomplished through another, separate data collection agency) on the remaining 15000 km network. During the data collection on the remaining network, the Consultant will assist/advise Gujarat R&BD in collection and quality checking of these data in the field. The Consultant will subsequently validate and input the data in the system.

- c. **Training, Implementation and Support:** In order to improve technical skills and management capabilities of the R&BD, the Consultant will impart appropriate training and undertake skill enhancement of R&BD officers to manage the GujRAMS efficiently and effectively. The Consultant will prepare a training plan and train R&BD officers on data collection/verification, system use (data input, view, prepare maintenance plan etc.) and system backup/maintenance for three (3) years after Operational Acceptance of the system

In order to maintain/troubleshoot/bug fix/upgrade the system and to safeguard the application in case of a technology upgrade, the Consultant will have to provide this services for a period of three (3) years after successful completion of Operational Acceptance of the GujRAMS. The period of these three (3) years after Operational Acceptance is also termed as O&M and is part of the O&M period.

The consultant will also provide assistance to R&BD (specific group under Policy and Planning Unit who is assigned the responsibility of GujRAMS) to coordinate data collection (annually by R&BD or

through a separate agency) to ensure its continuity and consistency, check the compiled data and load the same to the GujRAMS and prepare annual maintenance plan, budget and annual report for the road network during the three (3) years of O&M period.

PMC of GSHP-II will oversee the development of GujRAMS on behalf of R&BD but R&BD Gujarat may choose to avail the services of a third-party agency, if required, to oversee the design, implementation, and testing of GujRAMS to be delivered by this Consultant.

Project Duration

The scope of work of this Consultant, as described above, is expected to be completed in two parts. The first part involves design, development, testing, training and implementation of GujRAMS using the data collected on the pilot project. This is expected to last the first eighteen (18) months of the project. The second part (also termed as O&M period as defined previously) involves operationalizing the GujRAMS, providing training, and support for system maintenance over a three-year period after successful Operational Acceptance of GujRAMS. And hence the total duration of this Consultancy is expected to be fifty-four ($18+36 = 54$) months.

The second phase of the project (as described in the Project Outline above) involving data collection on the remaining 15000 km of SH, MDR and ODR will be initiated after finalization of data collection methodology and forms by the Consultant. A separate data collection agency will be engaged through a separate procurement process using the ToR prepared by the Consultant. The expected duration and start of the data collection services will be finalized in consultation with R&BD by Phase-1 Consultant.

The Government of Gujarat (GoG), Roads and Buildings Department (R&BD) through the Superintending Engineer - PIU, R&BD-Gandhinagar, now invites eligible consulting firms ('Consultants') to indicate their interest in providing the services described in this request for Expressions of Interest. Interested consultants should provide information demonstrating that they have the required qualification and relevant experience to perform the required services.

Criteria for Shortlisting

The criteria for shortlisting are:

1. Experience of design, development, configuration and implementation of road asset management system of at least two large road networks totaling at least 2,500 km road length in the last seven (7) years, of which implementation of one road network should have been completed within the last five (5) years.
2. Experience of Planning and programming of road network maintenance, rehabilitation and improvement using HDM-4 in the last seven (7) years for at-least 5,000 km.
3. Experience of field data collection for at least 5,000 km of road network using vehicle mounted Differential GPS (DGPS), and automated road/pavement data collection equipment, and processing of data for asset management in the last seven (7) years
4. At least five (5) years' experience in providing support for design, maintenance, rehabilitation, or improvement of highways, roads and bridges to government organizations in the last seven (7) years.

Experience in South Asia region / India *will be an* added advantage.

Preference may be given on merit to the provider of a commercial-off-the-shelf (COTS) solution to ensure quicker implementation and upkeep of the system beyond the duration of this contract. However non-COTS solutions will be considered where Consultants can demonstrate a history of software support and upgrades.

For joint venture (JV), the lead member to be nominated should be the one which meets the criterion specified in item (1) above.

The attention of the 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 & Grants] by World Bank Borrowers, January 2011, ('Consultant Guidelines'), setting forth the World Bank's policy on conflict of interest.

The consultants may associate with other firms in the form of a joint venture or a sub-consultancy to enhance

their qualification. A consultant will be selected in accordance with the Quality and Cost Based Selection (QCBS) method set out in the Consultant Guidelines. Further information can be obtained from the address below during office hours i.e. from 1100 hrs to 1730 hrs on working days..

Expression of Interest clearly marked “**Consultancy Services to Develop and Implement a Sustainable Web-based Gujarat Road Asset Management System (GujRAMS) for R&BD, Government of Gujarat, Gandhinagar**” in sealed cover must be delivered to the address below (in person, or by courier, or by Indian Post) on or before 04/12/2017, 12:00 hours (IST). **Submission of EOI must be in hard form in sealed envelopes, 2 copies (1 original and 1 copy).**

**Office of the Superintending Engineer,
Project Implementation Unit,
Ground Floor, Nirman Bhavan, Sector 10/A,
Gandhinagar. 382010, Gujarat
Tel.: + 91 079 23252986 Fax: + 91 079 23251915
e-mail: se-piu-rnb@gujarat.gov.in; sepiu.dksolanki@gmail.com**

Information Required from Consultants

The Consultant should provide information such as their roles in executing the above services, whether as a sole provider or as partner in a joint venture; in the latter case, indicate the scope of work, and percentage of the value of its share of services provided. Provide details of scope of services of each assignment with statement of assignments completed in the last seven (7) years, supported with completion certificate(s) from the employer of the services to demonstrate suitability for the present assignment.

Instructions for Submission of Expression of Interest:

1. The consultant shall read thoroughly the “Guidelines for Preparation of Expression of Interest” provided herein later before preparing EOI.
2. If the consultant wishes to submit certain information not covered in the guidelines that would be in his interest, he may do so. But the required details must be submitted in the stipulated formats only.
3. An association of the consultants can take either the form of joint venture or a sub-consultancy. In case of joint venture a letter, indicating their intent to form a joint venture shall be submitted duly signed by all the members. An authorized representative of the lead member shall sign the original submission letter in the required format for EOI submission and shall initial all pages. The firm providing the core expertise is to be designated the lead firm with all other partners being qualified to carry out responsibilities under the contract.
4. The consultant (including the individual members of any joint venture) shall submit only one application, either in its own name or as part of a joint venture member in another application. If a consultant, including any joint venture member, submits or participates in more than one application, all such applications shall be disqualified and rejected.
5. The application and all related correspondence and documents should be written in English language only. Any supporting documents and printed literature in any other language must be supplied with translations in English language. Supporting material not translated into English, may not be considered in evaluation of the application.
6. Incomplete and / or conditional EOI application shall be liable to rejection without any reasoning whatsoever.
7. RFP will be issued to the short-listed consultants only.
8. The EOI submission shall be placed in a sealed envelope clearly marked “**EOI PROPOSAL**”, to provide “**Consultancy Services to Develop and Implement a Sustainable Web-based Gujarat Road Asset Management System (GujRAMS) for R&BD, Government of Gujarat, Gandhinagar**”, reference number, name and address of the consultant, and with a warning “**DO NOT OPEN UNTIL 04/12/2017, 12:30 HOURS (IST).**”

Guidelines for Preparation of Expression of Interest

The following information shall be submitted in the given formats, and where no such format is specified, an appropriate standard format may be used.

1. Complete name of firm, date established and type of organization, whether individual, proprietorship, partnership, private limited company, public limited company etc. (as per Annexure I).
2. Exact and complete corporate/registered/home office address, business address, telephone numbers, fax numbers, E-mail and cable address. For consultant of foreign registry, indicate if there is any branch office(s) established in India with details in the aforesaid manner. Information is to be furnished by the sole applicant or members of joint venture individually (as per Annexure I).
3. If the present firm is a successor to or outgrowth of one or more predecessor firms, name(s) of former entity(ies) and year(s) of their original establishment with details must be furnished in the aforesaid manner. Information is to be furnished by the sole applicant or members of joint venture individually (as per Annexure I).
4. A brief narrative description of the firms is to be furnished by the sole applicant or members of joint venture individually (as per Annexure I).
5. Consultant's substantial experience shall be given under the four categories shown in Annexure II.
6. The detail must include the project name, its initiation and completion dates, type and scope of work performed (segregated by each joint venture member). If the experience is for an asset management system, the details of modules, system architecture, technology, implementation framework and current status must be mentioned. Experience in data collection must mention the duration, equipment used, network covered etc. (Annexure III). Employer's completion certificates shall be required to be submitted by the shortlisted firms.
7. An undertaking for the information being true shall be given as per Annexure IV.

Annexure-I

Expression of Interest Form for Consulting Firm or Joint Venture (To be filled up by each constituent in case of a joint venture)

1.

Consultant Name	Date of Establishment	Country	Annual Turnover in INR	Type of Organization			
				Individual	Partnership	Corporation	Other

2. Corporate/Registered Office/Business Address/ Telephone Nos./ Cable Address/Email address of consultant, its branch offices (including members in case of joint venture)
3. Consultant's former name and year of establishment (including that of members in case of joint venture)
4. Narrative description of consultant firms if any (Use another sheet, if necessary)
5. Name of, not more than two (2) principals, who may be contacted with title, telephone number/fax number, Email address.

Annexure II

Experience

Sr No	Project Name	Date of Start	Date of Completion	Category of Services Rendered (A,B,C and D)*	Category of Road Network and Length Covered	Details of Data Collection Equipment Used (For Category C below in the footnote Only)	Total Consultancy Fees in INR(Applicant's Share in Case of JV)	Client (With complete address, contact person, telephone No.,Fax No.and E mail address)	Funding Agency	Reference Page No. for Certificate by Client &Other Details
1	2	3	4	5	6	7	8	9	10	11
1	Sole consultant or for each of the members in case of JV,									

*Description of category of services-

- A) Design, development, configuration and implementation of pavement management system/ road asset management system in at least two large road network totaling at least 2,500 km road length in the last seven (7) years, out of which one should have been completed in the last five (5) years.
- B) Planning and programming of road network maintenance, rehabilitation and improvement using HDM-4 in the last seven (7) years for at least 5,000 km.
- C) Field data collection for at least 5,000 km using vehicle mounted Differential GPS (DGPS), and automated road/pavement data collection equipment, and processing of data for asset management in the last seven (7) years
- D) At least five (5) years' experience in design/maintenance/rehabilitation/improvement of highways, roads and bridges in the last seven (7) years.

Annexure-III

Detail of Completed Works and Name of Employer

Each assignment must be separately supported by detailed Project Description Sheets containing the following details:

Name of overall assignment:

Location of overall assignment:

Client's name and address:

Completion (actual/estimated vis-à-vis stipulated):

Description of assignment:

Description of services provided by the firm (segregated by each JV member):

Annexure- IV

Undertaking

I certify that the information in the above Expression of Interest forms is true to the best of my knowledge. I also understand that any misleading or wrong information will disqualify this application by the client without any reasoning whatsoever.

President/ Managing Director
or
Authorized Signatory of Applicant