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

COUNTRY- India
NAME OF PROJECT – Uttarakhand Health Systems Development Project (UKHSDP)
Loan No./Credit No./Grant No.: 5948-IN

Assignment Title: Developing software for data entry, conducting data entry and managing database for Family Health Cards

Reference No. : UKHSDP/2018-19/Insurance/DE

The Govt. of Uttarakhand has received financing from the World Bank toward the cost of the Uttarakhand Health Systems Development Project (UKHSDP) and intends to apply part of the proceeds for consulting services.

The consulting services (“the Services”) include Developing software for data entry, conducting data entry, managing database for Family Health Cards

The UKHSDP 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 as per the attached Terms of Reference

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 & Grants] by World Bank Borrowers (“Consultant Guidelines”), setting forth the World Bank’s policy on conflict of interest. In addition, please refer to the specific information on conflict of interest related to this assignment.

A Consultant will be selected in accordance with the Consultants Qualification Selection (CQS) method set out in the Consultant Guidelines.

Further information can be obtained at the address below during office hours [i.e. 1000 to 1700 hours]. Proposals shall be submitted on e-tendering website only. Proposals submitted using any other method will be rejected. Details about how to submit proposals using e-tendering are provided in the document

Attn: Additional Project Director
Office of Project Director, Uttarakhand Health System Development Project
1st Floor, Homeopathy Directorate, Danda Lakhaund, Sahastradhara Road, Dehradun
Phone -0135-2607610
E Mail – apd.ukhspd@gmail.com
**Hiring of a consulting firm for developing software for data entry, conducting data entry, managing data base for Family Health Cards**

**BACKGROUND**

Uttarakhand Health Systems Strengthening Project (UKHSDP) is conceived as a strategic initiative to enhance people’s access to quality health care services in the state of Uttarakhand. The Project is financed by the World Bank and implemented by Uttarakhand Health and Family Welfare Society (UKHFWS). The project seeks to support Uttarakhand in improving access to quality health services and in providing health financial risk protection. Specifically, the focus of the project is on improving access to health services for the predominantly remote population of the state, through strengthening public and private health-delivery systems; promoting greater stewardship and managerial capacity in the health directorate; improving information systems; augmenting monitoring and research; and extending coverage of state health insurance scheme beyond hospitalization to include primary healthcare services.

Project is to be implemented over six years with total cost of USD 125 Million, out of which the World Bank will provide financial support of USD 100 Million. The project has two components as follows: a) innovations in engaging the private sector (for integrated service delivery and for health financing), and b) stewardship and health systems improvement. A description of the activities under the two project components is provided below.
A. Detailed Overview of the Project Components

Component 1. Innovations in engaging the private sector:

- Innovations in engaging the private sector would finance engagement with the private sector in the delivery of healthcare services as well as in healthcare financing. This component will expand access to services by creating integrated, technology-enabled health system architecture with enhanced focus and availability of primary care, emergency care and necessary referral services. It will also expand financial protection by defining a benefit package of primary care services for child and adolescent health care and for the management of non-communicable diseases under the Mukhyamatri Swasthya Bima Yojana (MSBY).

The component will have the following subcomponents:-

• Innovations in Delivery of Primary Care Services:
  - Performance-based contracting for an integrated network providing emergency response, primary care and referral services through mobile medical units backed by outsourced community health centers (CHCs), and specialist care based at the district level.
  - Telemedicine and Health helpline integration

• Innovations in Healthcare Financing:
  - This sub-component supports expansion of primary care coverage and the supportive activities in the health insurance programs most notably The State scheme i.e. MSBY and the Ayushman Bharat National Health Protection Mission while designing, implementing and evaluating benefit packages around
childhood and adolescent health as well as case management of non-communicable diseases in primary care settings.

**Component 2. Stewardship and system improvement:** This component will strengthen the government’s capacity to engage effectively with the private sector, and therefore, to enable the government to provide effective stewardship to improve the quality of services in the entire health system and particularly in its capacity to effectively pursue the innovations being planned under this project. The component will focus on strengthening the institutional structures for stewardship and service delivery and augmenting the state’s human resource capacity, so that the necessary skill sets required for effective implementation of the project and the state’s health programs are available. The strengthened capacity will serve beyond the activities of this project, as it will contribute to the government’s stewardship role for the health system as a whole. It will support research and evidence generation, use of evidence for strategic planning, and improved information systems for data generation and management, including timely feedback to providers. It will also support Facilities Assessment as well as contracting of agencies on a turnkey basis to support the attainment of NABH quality standards in identified public health facilities in the state. Finally, the component will promote a multidisciplinary approach that will strengthen the ability of the health system to respond to seasonal and context-specific needs. Project management costs will also be financed from this component.
This Terms of Reference (TOR) describes the scope of work of an agency that will develop an MIS based system for baseline data entry and conduct data entry of information collected by ASHAs during their household survey, and managing the data base and information system for eligible families for the insurance schemes operational in the state.

The UKHSDP seeks the services of a Service Provider/Management Information System Developer, to enable the collection, analysis, management and reporting/dissemination of data gathered from every family in the State.

**Objective of the Assignment**

The objective of the assignment is to create and maintain a database of the data collected from every family in the State aimed at collecting household data for identification of insurance cover eligibility in the Government Sponsored Health Insurance Schemes in the State including MSBY, and Aysuhman Bharat-National Health Protection Mission. The database will be used by the Department of Health & Family Welfare, Government of Uttarakhand (GoUK) to categorize households by type of health insurance coverage and to ultimately provide better healthcare services to citizens of the State with coverage facilitated by the Family Health Card. In order to achieve this, GoUK by means of a Family Health Survey (Data Form Attached) has collected data of every household in the
state and this data need to be digitized. The server space for a period of 05 years for hosting of application and data will be provided and owned by the Govt.

**Summary of Features Sought**

An outline of the functionalities sought for the Data Base and the Management Information at the minimum the system should have:

a) Ability to capture data through a PC console.

b) Ability to analyze quantitative data.

c) Ability to visualize filtered/cross-tabulated data (showing info-graphics for frequencies, percentages, trends, geo-maps/spatial data etc.) and support data processing.

d) Linkage possibilities with an existing organizational website (website integration/publishing data or information online)

**Details of Functionalities Sought**

i. **Validations:** The system should have ability to integrate specified data validity checks and to provide for instructional questions or help texts for the data entry operator.

ii. **Field types:** The system should support the use of; text, numbers, date choosers, radio buttons,
iii. **Languages**: The System should support Hindi and English

iv. **Case management**: The System should give provision for relationship/pulling data previously collected/entered, hence supporting tracking of responses from the same respondents.

v. **Calculations**: The System should generally support calculations including; *sum, average, counts* etc. during data analysis after data upload.

vi. **Roles and permissions**: The System should have a provision for working with users with either; writing rights only, reading rights only or both writing and reading rights.

vii. **Ease of customization**: The System should be readily customizable to fit the organization’s emerging data collection, analysis and management requirements beyond the UKHSD Project.

vii. **Preliminary analysis and visualization**: After data entry, the System should provide for preliminary analysis of data (*mean, mode, median, Standard Deviation, regression, correlation, cross tabulation etc.*) and with clear visualization of results (*bar charts, pie charts, infographics etc.*) on filterable dashboards.

ix. **Hosting services**: The System should ensure confidentiality and security of data collected and submissions made. The data should be encrypted and inaccessible to by hackers. The Hosting will be on MeghRaaj Cloud of the NIC / Any other Govt. Server and compliance with Aadhar Act will be ensured.
x. **Export functions:** The System should provide for export functions, especially for Excel and Access, for additional analysis if need be.

xi. **Search engine:** The system should be able to help one search for keywords within the titles and descriptions of the icons’ text boxes.

**Scope of Work and Responsibilities:**

The System development process will involve the following steps:

a) Conduct needs assessment with UKHSDP and Department of Health team on the conceptual design behind the data bank, queries’ and reports expected prior to configuration of the data bank

b) Design, implement and test the database management system

c) Migrate sample data from data collection forms to the new database

d) Connect the database to the document library and mapping interface to facilitate direct updates. Create a sample document and mapping layer based information in the data management system.

e) Conduct User Acceptance Testing for the tools

f) Address any problems with functionality or usability identified during the testing period

g) Design of the security architecture, preparation and implementation of a security administration plan for the platform including security audit.

h) Collection of completed forms from Block level and ensure data entry
i) Scan all the forms and keep a data base on the web-portal developed for data entry and storage.

j) Migrate complete data (approximately 22-25 Lac families) from data collection forms to the new database

- Creation of a computerized data entry template with relevant quality control tools to ensure the quality of data entry,
- Organization of double blinded data entry (DBDE), automated detection of the differences of the data entered and subsequent entry of the correct data,
- Performance of data quality controls while data is being entered,
- Delivery of entered data in a format readable by common software.

k) Handover hand-written filled-in forms to GoUK after completion of data entry.

l) Present output, train and provide technical support to the teams on how to use the database (ability to update, edit, and delete information, to add fields and produce new reports as needed). Provide capacity to expand database use.

m) Handover all the background programming and source code to GoUK to enable them to make any modification in data entry tool, as and when required.

n) Use of MDDS standards of Department of Medical, Health & Family Welfare, Govt. of India for data and application
o) Development of documents including Systems Requirement Specification, Detailed Design, Data Dictionary, User Manuals, Maintenance Manuals for the platform as per acceptable standards

p) Backstopping support to ensure trouble shooting and validation of database requirements.

q) Maintainance of the database for the period of 6 months

**Deliverables along with timelines**

The following are the deliverables expected from this assignment:

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<tr>
<th>S N</th>
<th>Deliverables</th>
<th>Broad Contents</th>
<th>Timeline (number of days after previous stage)</th>
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<tbody>
<tr>
<td>1</td>
<td>Technical assessment report</td>
<td>Technical assessment report with recommendations and action plan developed.</td>
<td>3 days after signing</td>
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<tr>
<td>2</td>
<td>Development of Model</td>
<td>Conceptual model developed for on-line Management Information System for the Family Health Card database.</td>
<td>2 days</td>
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<td>3</td>
<td>Initial Presentation</td>
<td>Presentation of layout and design of system and incorporation of technical suggestions.</td>
<td>2 days</td>
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<tr>
<td>4</td>
<td>Tools development</td>
<td>Database underlying forms, sheets and tables developed for data entry and access.</td>
<td>3 days</td>
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<tr>
<td>5</td>
<td>data bank</td>
<td>Final model of web based data bank with all features including</td>
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<tr>
<td>Step</td>
<td>Task Description</td>
<td>Details</td>
<td></td>
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| 6    | Data entry at block level and Digital Migration | - Migration of all existing data from hard copies in the new systems and testing including validation  
  - Scanned images (soft copy) of completed forms | 30 days |
| 7    | Web based Application | Development of Web application and Uploaded data in web application | |
| 8    | Final Data report | - Data in soft copy  
  - Control reports. | 5 days |
| 9    | Documentation | Preparation of documents including Systems Requirement Specification, Detailed Design, Data Dictionary, User Manuals, Maintenance Manuals for the platform as per acceptable standards | 4 days |
| 10   | Training | Staff training session on management of systems and backstopping plans developed. | 30 days |
| 11   | Maintainance | Maintainence of the database including but not limited to  
  - Correction in the entries | For the period of 6 months after finalization of |
<table>
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<tr>
<th>Verification of forms</th>
<th>Maintainance of database and periodical changes as required</th>
<th>Missing entries</th>
</tr>
</thead>
</table>

**REPORTING**

The firm/ Agency will work under overall direction and guidance of UKHSDP office with direct reporting to the Additional Project Director, UKHSDP. The firm/ Agency for day to day technical and managerial coordination will directly communicate with Joint Director, Health insurance and work closely with his team. The firm/ Agency is also required to provide name and contact details of single point of contact at their end. UKHSDP office will only contact with this person for any communication and coordination regarding work.

**REVIEW & MONITORING**

The performance of the Firm/ Agency will be assessed on the basis of agreed deliverables. The firm/ Agency will prepare detailed action plan for the assignment and share it with UKHSDP. A joint weekly review mechanism will be put in place and represented by officials of UKHSDP and Firm/ Agencies. In case, UKHSDP has any suggestion/ recommendations related to the assignment deliverables, it will inform the agency in writing. The firm/ Agency will comply with the recommendations made by UKHSDP and complete the assignment accordingly at no additional cost. If there are any grievances for any party, it must be shared with other party in writing.
Review Committee will be comprised of the following members:

Project Director /Additional Project Director; UKHSDP

Joint Director; Health Insurance UKHSDP

Assistant Director Procurement; UKHSDP

Designated IT expert

Any other official designated by the Project Director

Proposal Submission

All eligible bidders are required to submit proposals along with documents establishing their eligibility online through e-procurement portal (http://uktenders.gov.in/nicgep/app) no later than 2nd August 2018. Proposals submitted in any other mode will not be accepted. Bidders are required to obtain id and Digital Signature Certificate (DSC) from the designated firms (details available on e-procurement portal) and then register with the Government of Uttarakhand e-procurement portal and submit proposals using their ID and DSC. Updates regarding the activity can be found on following link.


Proposal should in the form of two files, following are details

1. Profile of the service provider

2. A technical proposal detailing;
   - Understanding of the TOR.
   - Ability to meet eligibility criteria and other functionalities sought.
   - Previous/current experience in supporting a similar kind of work.
   - Examples of organizations currently supported.
   - Turn-around times for support services.
ELIGIBILITY CRITERIA

Following are the defined qualifying criteria for the Consultant:

- Firm should have at least 5 years of documented experience in social/demographic and development sector / household survey with regard to database designing, data entry and maintenance services. Specific Experience in health sector surveys and data base management is preferable.
- Current availability of key professionals with qualifications and experience in this field. Firm/Consultancy’s team on this project should have at a minimum the following staff at for conducting this assignment:

<table>
<thead>
<tr>
<th>Role</th>
<th>No of Post</th>
<th>Function</th>
<th>Qualifications &amp; Experience</th>
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<tbody>
<tr>
<td>(i) Project Manager</td>
<td>1</td>
<td>For overall functioning of the entire project</td>
<td>MBA (IT) / MSc. (IT, CS) / MCA from recognized institution</td>
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<td>At least 10 years of working experience and minimum 3 years of experience in advising central/State Governments in MIS/Database implementation in health/social sector</td>
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<td>5 years plus Experience in health sector is a must</td>
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<tr>
<td>(ii) Functional</td>
<td>1</td>
<td>Responsible for Requirement gathering, coordination with stakeholders involved in the project</td>
<td>MBA from recognized institution</td>
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<tr>
<td>Consultant</td>
<td></td>
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<td>At least 5 years of working experience in social sector databases and min 3 years of experience in project management and scheme implementation</td>
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<td>(iii) MIS</td>
<td>2</td>
<td>For designing,</td>
<td>B.Tech (IT, CS) / MCA having</td>
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<tr>
<td>Expert</td>
<td>maintenance and updation of the system</td>
<td>min 3 years of experience in designing and maintenance of health/social sector databases and MIS system</td>
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<td><strong>(iv) Data Entry Operators</strong></td>
<td>As per requirement</td>
<td>To assist with the Data entry and database management</td>
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<td></td>
<td>• Graduate and at least 6 months diploma in Computer/IT</td>
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