

**Government of People's Republic of Bangladesh**  
**Bangladesh Bureau of Statistics**  
**Population and Housing Census 2021 Project**  
**Parishankhyan Bhaban (1<sup>st</sup> Floor)**  
**E-27/A Agargaon, Dhaka-1207**

**REQUEST FOR EXPRESSION OF INTEREST (EOI) (NATIONAL FIRM)**

1.	Ministry/Division	Ministry of Planning
2.	Division	Statistics and Informatics Division
3.	Agency	Bangladesh Bureau of Statistics (BBS)
4.	Procuring Entity Name	Project Director, Population and Housing Census 2021 Project, BBS
5.	Procuring Entity District	Dhaka
6.	Expression of Interest for	Development of Mobile Application (CAPI System) and Web (Browser) Application for Data Collection, Supervision & Monitoring, Data Management, Data Processing, Data Analysis and Reporting of 'Socio-Economic and Demographic Survey (SEDS)'.
7.	EOI Selection of	Consulting Firm.
8.	EOI Ref. No.	52.01.0000.409.52.358.22.720
9.	Date	13 September 2022
10.	Procurement Method	Quality and Cost Based Selection (QCBS)
11.	Budget and Sources of Fund	Development Budget, Government of Bangladesh (GoB).
12.	Project code	224295100
13.	Project Name	Population and Housing Census 2021 Project
14.	EOI closing date and time	EOI to be submitted by 3.00 pm of 29 September, 2022 to the Project Director, Population and Housing Census 2021 Project, Parishankhyan Bhaban, 1st floor (Block-2, E-27/A, Agargaon, Dhaka-1207 in sealed envelope with marked 'Expression of Interest'.
15.	Mobile Application (CAPI System) and Web Application for Socio-Economic Demographic Survey:	
<p><b>1. Mobile Application (CAPI System):</b></p> <ul style="list-style-type: none"> <li>a) Develop Android Mobile Application (CAPI System) for Data Collection, Supervision and Monitoring of Socio-Economic and Demographic Survey;</li> <li>b) Data Collectors will capture the GPS location of each enumerated household using the Application;</li> <li>c) Data Collectors will automatically receive the particular Questionnaire form into his/her TAB using the applications.</li> <li>d) Data Collectors can collect data both in online and offline with the facility of sending offline data when the TAB is online.</li> <li>e) Data Collectors can check and even edit the data, which is collected through their TAB in offline.</li> <li>f) There must be some skipping options for the questionnaires, in which the mandatory fill-up features are needed.</li> <li>g) Huge Inter-question validation must be ensured and added question panel for adding a set of questions</li> <li>h) The Applications must have access control and be protected by user id and password.</li> <li>i) The questionnaire will be displayed by modules in the application which must be displayed on the screen one by one/chronologically with swapping and navigation features.</li> <li>j) The Smart backend should be Web/mobile Applications (up-to-date version) for managing, monitoring and decision-making for survey data.</li> <li>k) The data collection panel should show the progress of filling up the questionnaire during data collection.</li> <li>l) Intelligent dashboard must be in the application for a different level of users with some graphical and different features of smart analysis.</li> <li>m) Once the data collection from each household is fully completed, the data will be stored in encrypted format in the TAB and after confirmation, a copy of that will be sent to the server.</li> <li>n) The application should support diverse types of household questions like image, short/ long text, Geo-location (GPS enabled with latitude/longitude), numerical, multiple choice including provisions for mandatory or optional question, and so on.</li> <li>p) There should be an option to synchronize CAPI data with the server-based web application on the availability of the internet connectivity.</li> </ul>		
<p><b>2. Web (Browser) Application:</b></p> <ul style="list-style-type: none"> <li>a) Develop Web (Browser) Application for Data Collection, Supervision &amp; Monitoring, Data Management, Data Processing, Data Analysis and Reporting of Socio-Economic and Demographic Survey (SEDS) 2022;</li> <li>b) The interface should be user friendly with easy to access dashboard.</li> <li>c) The Application should be centralized, web-based solution and support cross browser platform (Chrome, Internet Explorer/ Microsoft Edge, Firefox, Opera etc.).</li> <li>d) Front-end development tool should be open source to avoid any license purchase and Back-end central database should be Oracle.</li> <li>e) Must have role-based user authentication and central user access control system to multilevel user creation and privilege set-ups options by system admin.</li> <li>f) Must have intelligent dashboard for different level of users with some graphical and different features of smart analysis.</li> <li>g) Must have option for user registration and geo-code management and must have data analysis functionality.</li> <li>h) Monitoring facilities of data collection with the multiple supervision levels.</li> <li>i) Different types of data table, related dynamic charts and information will be displayed with download facilities in the supervision dashboard according to the requirements of Authority.</li> <li>j) Generate real-time progressive data collection report (e.g. data collector wise report, date/month/year wise report, error wise report, area wise collection report, complete/ incomplete report etc.) via map and grid-based view etc.</li> <li>k) Features to review detail report from the Map against a specific enumerators/data collectors for a specific area.</li> <li>l) Detect fraudulent data from the map by reviewing data set's GPS coordinates.</li> <li>m) Data export and download facility from the system.</li> <li>n) Any other issues in relation to the mobile and web application will have to be carried out according to the requirements of the project authority for the successful completion of data collection.</li> <li>o) Supervisory levels can monitor the survey data and will also be able to give feedback so that the enumerator can update.</li> <li>p) Application should have fraudulent data finding feature.</li> <li>q) Application should have data edit feature with data validation logic same as mobile application.</li> </ul>		
<p><b>3. Administrative Features and Dashboard:</b></p> <ul style="list-style-type: none"> <li>a) The Administrator can check the data sent to the server by users, can control, create, edit or delete users of the application and their access, can generate and view data collection report etc.</li> <li>b) Supervising and monitoring level users should be incorporated to oversee the submitted data within their jurisdiction.</li> </ul>		
<p><b>4. Compatibility:</b> The both applications must be compatible with the Oracle Exadata (version 19c) as Central Database and latest RedHat Linux as OS.</p>		
<p><b>5. Type of Data:</b> The application must be able to collect multiple type of data, like- single choice; multiple choice; geo location; image; normal text; live date and time etc.</p>		
<p><b>6. Qualifications &amp; Experience:</b></p> <ul style="list-style-type: none"> <li>a. Must have Nationwide electronic data collection knowledge on system development for Bangladesh.</li> <li>b. Must have minimum 05 (Five) years' sound experiences in development and management of mobile apps integrated with Oracle/SQL Server/MySQL database in the local context.</li> <li>c. Must have minimum 10 (Ten) years' sound experiences in development and management of web-based applications integrated with Oracle/SQL Server/MySQL database in the local context.</li> <li>d. Must have a proven experience to deliver at least 03 (three) similar types of system development for statistical survey data collection with completion certificate.</li> <li>e. Must be experienced of successful implementation of the system to rollout at least 02 (two) nation-wide project including Bangladesh Government /Autonomous body/ reputed private organization.</li> <li>f. Must have an experience of developing minimum 03 (three) mobile android apps in play store including Government Departments.</li> <li>g. The service provider should have familiarity with large quantity optimal data storage and retrieval procedures;</li> <li>h. Must have a pool of domain experts capable in design and develop a secure and standardize Web Application and CAPI system as well as data backup, restore and access security control management.</li> <li>i. Experience of similar types of system development in BBS will be given preference.</li> <li>j. Should have valid legal entities (Registration from respective government authority, Trade License, VAT and TIN Registration and others) for working in Bangladesh.</li> <li>k. Must be a Member of Bangladesh Association of Software and Information Services (BASIS).</li> <li>l. Must have Audit report for the last 03 (Three) years.</li> </ul>		
<p><b>7. Handset Compatibility:</b> The Applications must be compatible with updated version Android of Tablet Device and Web Browser.</p>		
<p><b>8. Screen Resolution:</b> The Applications must able to fit for any screen size of PC, Laptop and Tab that is supported by Android and Web Applications.</p>		
<p><b>9. Unicode Support:</b> The Applications must have to support Unicode Bangla.</p>		
<p><b>10. Online Synchronization:</b> The Web and Mobile apps must have the ability to synchronize with particular online server and upload data when it will connect with the internet.</p>		
<p><b>11. Integration:</b> There should be an option to integrate CAPI and web application with third party application. Applications, Device and Database must be compatible.</p>		
<p><b>12. Manuals:</b> Have to provide User Manual, Operation Manual and Administrative Manuals (Technical Manual with related diagrams and design documents).</p>		
<p><b>13. Warranty:</b> Application provider company will provide the technical support during the project running time.</p>		
<p><b>14. Training on the Applications:</b> Have to provide hands on training to the master trainer for 04 (four) days training on the Web and Mobile Applications for BBS Officials (minimum 100 in two batches) at the Dhaka Headquarters.</p>		
16.	Confidentiality	I. Service Provider shall maintain confidentiality of the data captured by the information system and shall not share the same with anyone for any purpose without explicit request from competent BBS authority. II. Non-disclosure Agreement: The Parties shall conclude a mutual non-disclosure agreement (NDA) in order to determine the details of confidentiality obligations.
17.	Type of contract	The consulting firm will be selected by using the standard document of complex lump sum contract issued by CPTU of planning Ministry of GoB. It is expected that the services will be required on January 2023 (aprox) and shall be completed on June 2023 (aprox).
18.	Name of Official Inviting EOI	Mr. Md. Dilder Hossain
19.	Designation of Official inviting EOI	Project Director
20.	Address of the Official inviting EOI	Project Director, Population and Housing Census 2021 Project, Bangladesh Bureau of Statistics, Parishankhyan Bhaban (Level-1, Block-B), E27/A Agargaon, Sher-e-Bangla Nagar, Dhaka-1207.
21.	Contact details of Official inviting EOI	Telephone: 02-55007008, Email: dilderbbsbd@gmail.com
22.	Information is available at	website: <a href="http://www.bbs.gov.bd">www.bbs.gov.bd</a> and <a href="http://www.sid.gov.bd">www.sid.gov.bd</a>

Interested firms are invited to submit their EOI indicating that they are qualified to perform the services, details of experiences and required qualifications stated above.  
The procuring entity reserves the right to accept or reject any or all of the EOIs without showing any cause.

Sd/  
Md. Dilder Hossain  
Project Director