

REQUEST FOR PROPOSALS

Development and deployment of innovative ICT-based data analysis, visualisation and reporting system for the ‘Voices from the Margins and Inclusive Policy Responses to Covid-19 Pandemic’ Project

Background

The Centre for Peace and Justice (CPJ) at Brac University is currently implementing a research project to create an information data-loop to inform and influence public policies and state responses on Covid-19 related relief, recovery and resilience measures. Based on a representative household panel of marginalised groups in Bangladesh, the project will track their understanding of and demand for healthcare policies and responses. There will be three rounds survey in panel setting (April, July and October 2021) under this study.

The key output of the project will be a validated and real-time public facing web-based portal which will provide a rapid feedback loop for systematic curation, analysis and reporting of public perception and feedback from five marginalised groups defined through five factors (economic opportunities, gender, living in remote areas with low access to health services, ethnic and religious background, and disability) in Bangladesh to critical issues pertaining to awareness of mitigation measures (including the vaccine), access to critical infrastructure like health, education, and social safety nets, self-assessed economic condition, levels of trust in key institutions and awareness of and responses to public information campaigns related to Covid-19.

Objectives of the Assignment – Development of Appropriate Data Analytics, Visualisation and Feedback Analysis Tools and Hosting the Solution on Cloud Based Infrastructure

The proposed initiative aims at collecting citizen feedback through ICT tools, on a set of pre-defined indicators. For this, a survey would be undertaken using ICT devices (using an appropriate platform, example android) with a pre-loaded questionnaire. A tracking system (e.g. GIS) on the device would help indicate the location from where data is collected thereby enhancing the reliability of data collection and enabling a “granular” analysis at the disaggregated level.

To this end, a **Dashboard based Analytical Tool to analyse and visualize the results of the survey is envisaged to be developed and maintained during the project period.** A state of the art web based dashboard will be developed to automatically analyse and graphically represent the results of the survey in real time, based on pre-defined analytical formulae. The access to various sections of the Dashboard will be rights based. A firm/individual (‘Consultant’) is proposed to be hired with credible experience in developing and executing ICT based applications (using Android platform) as well as provide technical assistance in undertaking field surveys. The detailed terms of reference for the Consultant are as provided below:

1. Scope of Work

Under this assignment, the Consultant will be expected to:

- (i) Develop appropriate ICT tools and applications (using an appropriate platform, example android) for CPJ to demonstrate the survey findings using data analytics and infographics along with a feedback loop. The extent and level of data disaggregation will be provided by CPJ.
- (ii) Once the system is developed, there is a need to demonstrate its use and effectiveness. In order to achieve this objective, dummy data tables will be provided to examine the use of the tools and technology. It is expected that the Consultant will support this piloting.
- (iii) Consultant will undertake the whole process of data analysis, visualization and maintain the feedback loop of the citizen. The analysis plan of the survey data will be provided by CPJ. There will be a need to customise the application as per the survey and analysis in the following two surveys in subsequent quarters.

2. Tasks to be Completed

- Design comprehensive systems for storing data, processing and disseminating information for various stakeholders – government representatives and public. This would encompass a web-based electronic ‘dashboard’ with appropriate data and maps to display the data collected through the system.
- Incorporate feedback received on the above ICT systems, from CPJ.
- For the technical design of this System, the Consultant should attempt to use, as far as possible, off-the-shelf, standardized, or open source tools and technologies, or tools and technologies that have already been tested in similar projects and systems elsewhere. As far as possible, the use of non-standard and purely customized tools and technologies should be avoided.
- The appropriate application will be developed in English. The Consultant shall design the system using technologies and tools that will allow for replicability in other locations and scale up to a state/ national level in the future with minimal additional programming requirements if feasible. Furthermore, the Consultant should avoid hard-wiring specific indicator types, forms of data collected, and variables used to allow simple modifications.
- Provide analysis of results, and prepare detailed online reports for household survey process, methodology and findings using three rounds of survey.

3. Expected Outputs

The following key outputs and deliverables are expected:

- Pre-testing the application (using an appropriate platform and application) for data analysis and visualization using dummy data tables.

- Developing appropriate back-end ICT systems for capturing data from the ICT-tool, processing and disseminating/ displaying information, including disaggregated details.
- Web based analytical tool/Dashboard displaying the results of the surveys.

4. Ownership of system and data

The Consultant will build and operate the System through the period covered by this contract. At the conclusion of this period, the Consultant shall transfer all resources, information, data and knowledge to CPJ. At no point should the Consultant release this data or any derivatives to any other party or agency without the formal approval of CPJ. The Consultant will be responsible for the security, storage and management of data during the project time. At the conclusion of the project, the Consultant must hand over all data to CPJ.

5. Reporting and Schedule of Deliverables

5.1 Duration of Contract

It is expected that the final application for web based dashboard displaying survey findings will be delivered within **two month** from the signing of the contract. The Dashboard with complete analysis both in the tabular format as well as on the Map format will be handed over within **2 weeks** of completion of survey. Since, this is an outputs based contract; the payment schedule would be dependent on the outputs. The proposed break-up of the timelines and payment structure is provided as in the table below. The duration of the project will be March-December 2021.

5.2 Schedule of Deliverables

	Activity	Timeline	Payment schedule
1	Contract initiation	Start of contract	
2	Inception report with review of existing systems and work plan	+ 1 week	40%
3	Complete design and testing of handheld based survey application	+ 3 weeks	-
4	Complete first round of household survey and development of backend reporting application. Report generation on agreed format.	+ 10 weeks	
5	Complete updating the data, analysis and report generation using second round of household survey on agreed format.	24 Weeks	30%
6	Complete updating the data, analysis and report generation using second round of household survey on agreed format.	36 Weeks	
7	Complete transfer of all resources, information, data and knowledge to CPJ to maintain the dashboard	+ 44 weeks	30%

6. Competencies and Qualifications

This assignment is expected to be undertaken by a Consultant experienced in doing similar work. The Consultant shall deploy a team qualified and experienced in undertaking the assignment. The preference shall be given to consultant (Firm) who has already developed similar solution for any multilateral agencies in any countries in South Asia. The main skills required are:

- Proven familiarity and expertise in design and implementation of ICT systems involving data capture using mobile applications and processing the data to enable public access in a user friendly manner.
- Expertise in use of mobile technologies for conducting surveys/ collating household information. It is desirable that the consultant has undertaken and successfully implemented at least one project of similar nature in last two years.
- Expertise in training volunteers/ enumerators and carrying out surveys.

Proposed Team Composition and Qualifications:

SN	Role	Qualification	Responsibility
1	Team Lead & Application Developers	Graduate with min 8+ years of experience in implementation of various mobile based applications Tools	Coordination of all project activities and delivery of outputs as per agreed specifications. Responsible for designing, development and implementation of ICT application.
2	Data Analytics and Visualisation Expert	Minimum 5 years of experience in analysing and designing various mobile based applications tools	Data analysis, visulisation and holding feedback loops. Usage of appropriate application and related hardware, software and interfaces.

7. Other instructions

The financial and technical proposal shall include all work and costs associated with setting up the required technologies, capacity building and training costs, staff time and other directly attributable costs to make this system fully functional over the period of the pilot. The proposal should include scope of the assignment to be undertaken by the firm/individual, identification of tasks to accomplish the above scope, methodology, CV's of senior professionals, and experience/example of carrying out similar activities.

Applications are welcome to be submitted to kawsher.ahamed@bracu.ac.bd until 21 March 2021. Please mention '*Development and deployment of innovative ICT-based data analysis, visulisation and reporting system*' in the Email subject line.