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REQUEST FOR PROPOSAL (RFP)

NAME & ADDRESS OF FIRM	DATE: November 19, 2020
	REFERENCE: RFP-BD-2020-044

Dear Sir / Madam:

We kindly request you to submit your Proposal for **Hiring a firm for Development of GIS based web and Mobile Apps (Android) for COVID 19 and Data Process Management** under a2i program.

Proposals shall be submitted on or before 4.30 p.m. (local time) on Monday, November 30, 2020

Please be guided by the form attached hereto as Annex 2, in preparing your Proposal.

Proposals may be submitted on or before the deadline indicated by UNDP in the e-Tendering system. Bids must be submitted in the online e-Tendering system in the following link: https://etendering.partneragencies.org; using your username and password. If you have not registered in the system before, you can register now by logging in using

Username: event.guest
Password: why2change

and follow the registration steps as specified in the system user guide.

Your Proposal must be expressed in the English, and valid for a minimum period of 90 days.
You are kindly requested to indicate whether your company intends to submit a Proposal by clicking on "Accept Invitation" in the system.

In the course of preparing and submitting your Proposal, it shall remain your responsibility to ensure that it submitted into the system by the deadline. The system will automatically block and not accept any bid after the deadline. Kindly ensure attaching the required supporting documents (*with file name less than 60 characters*) in pdf format which must be free from any virus or corrupted files. Proposals that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation.

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The Financial Proposal and the Technical Proposal files MUST BE COMPLETELY SEPARATE and uploaded separately in the system and clearly named as either "TECHNICAL PROPOSAL" or "FINANCIAL PROPOSAL", as appropriate. Each document shall include the Proposer's name and address**. The file with the "FINANCIAL PROPOSAL" must be encrypted with a password** so that it cannot be opened nor viewed until the Proposal has been found to pass the technical evaluation stage. Once a Proposal has been found to be responsive by passing the technical evaluation stage, UNDP shall request via email the Proposer to submit the password to open the Financial Proposal. The Proposer shall assume the responsibility for not encrypting the financial proposal.

PLEASE DO NOT PUT THE PRICE OF YOUR PROPOSAL IN THE 'LINE ITEMS' IN THE SYSTEM. INSTEAD PUT 1 AND UPLOAD THE FINANCIAL PROPOSAL AS INSTRUCTED ABOVE.

Any discrepancy between the unit price and the total price shall be re-computed by UNDP, and the unit price shall prevail, and the total price shall be corrected. If the Service Provider does not accept the final price based on UNDP's re-computation and correction of errors, its Proposal will be rejected.

No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the Proposal. At the time of Award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Contract or Purchase Order that will be issued as a result of this RFP shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a Proposal implies that the Service Provider accepts without question the General Terms and Conditions of UNDP, herein attached as Annex 3.

Please be advised that UNDP is not bound to accept any Proposal, nor award a contract or Purchase Order, nor be responsible for any costs associated with a Service Providers preparation and submission of a Proposal, regardless of the outcome or the manner of conducting the selection process.

UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a Purchase Order or Contract in a competitive procurement process. In the event that you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link:
http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-and-sanctions.html

UNDP encourages every prospective Service Provider to prevent and avoid conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, cost estimates, and other information used in this RFP.

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UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to preventing, identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its Service Providers to adhere to the UN Supplier Code of Conduct found in this link : https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/unscc/conduct_english.pdf

Thank you and we look forward to receiving your Proposal.

Sincerely yours,

Krishna Raj Adhikari
Senior Operations Manager
19th November, 2020

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Annex 1

Description of Requirements

Context of the Requirement	The coronavirus COVID-19 pandemic is the biggest global health crisis of our time and the toughest challenge the countries are facing worldwide. Bangladesh is the most densely populated country in the world, with 2.5% of world population living in only 0.3% area. We are currently facing severe challenges to fight the pandemic. The existing system is struggling to cope with the rapid number of challenges raising with the pandemic situation. The simplest solution to stop the spread is a contact tracing, isolation and intervention. However, without proper data source and digital tools, it is impossible to implement the solutions to stop the spread of infection. The medical system of the country struggles with testing each and every suspected COVID patient for infection, to serve severely ill patients, and also, to serve critically ill patients who require lunge ventilators. It is of utmost importance that we manage the limited resources we have to the best of our abilities. We have the infrastructure that can utilize to mobilize our healthcare workforce to spread awareness about COVID-19, identify high risk patients from the suspected patients so we can reduce the burden on our healthcare system and provide better support to the people who need them the most.
Implementing Partner of UNDP	ICT division
Brief Description of the Required Services	**3.1 Design and Development Mobile Apps(android) & Web Application with Dashboard (Digital COVID-19 Community Support Team (CST) System, Digital COVID-19 Sample Collection & Lab Result System, Digital COVID-19 Patient & Hospital Management System).** a. Design & development of Digital COVID-19 Community Support Team (CST) System i. Web & Mobile application for Community Health Workers to visit, screen & follow up potential patients ii. Web & Mobile application for Area Managers that allows Area Managers to communicate, assign

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	potential patients to Community Health Workers iii. Develop Dashboard of Digital COVID-19 Community Support Team (CST) System for viewing service statistics, visualize beneficiary data, download reports b. Design & development of Digital COVID-19 Sample Collection & Lab Result System i. Web & Mobile application for sample collection system with payment verification & traveler module, lab result view & entry ii. Dashboard for the Sample Collection module for viewing service statistics, create beneficiary account, serve beneficiary from web dashboard & download reports c. Design & development of Digital COVID-19 Patient & Hospital Management System i. Web and Mobile application for the Hopsital. Hospital user for COVID-19 Patient & Hospital Management system to admit, follow up & discharge COVID patients, track selected hospital resources & view COVID patients in the Hospital ii. Dashboard for COVID-19 Patient & Hospital Management System to track patient & hospital statistics from hospitals & view reports. 3.2 Pilot the Digital COVID-19 Community Surveillance System with Sample Collection System & COVID-19 Patient & Hospital Management Systems: Vendor will work in partnership with DGHS & A2i to run a pilot for the systems in areas that are selected by DGHS. 3.3. Zoning in the capital city, Dhaka, and the whole country, based on clustering in risk-areas and Map for the movement range and travel pattern of the population within the country or between countries.

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I. Plotting positive case data into map according to the address
II. Prepare database in excel data format for further use
III. Making clusters for defining different risk zones
IV. Identify risk zone and demarcate the zone where needed
V. Analyze public movement data
VI. Update dashboard with different map and statistical analysis

4. Technology Requirements

The systems will be developed for Android OS. The technological requirements for the development are listed below –

- Backend
  - Java Spring Framework
    - oAuth2 for authentication
    - REST APIs
    - Swagger for API documentation
  - Database
    - mySQL
- Frontend
  - Android: Kotlin, Android SDK, React Native, Device SDKs
- Data Encryption
  - HTTPS for encrypted data transmission using TLS
  - GIS Mapping Tool
    - ArcGIS, ArcGIS Pro, QGIS
  - Data Analysis
    - Python3.x
    - R
  - Visualization tool

Apache Superset, ESRI Operation dashboard for ArcGIS, Super Map dashboard

List and Description of Expected Outputs to be Delivered

Sl	Completed Products Under Each Area and Activity	Delivery Timeline
1.	An inception report including analysis of the technical requirements and Design Mobile Apps(android) & Web Application for i)Digital COVID-19 Community Support Team (CST)	15th day after signing the contact

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		System, ii) Digital COVID-19 Sample Collection & Lab Result System, iii) Digital COVID-19 Patient & Hospital Management System)	
	2.	Design & Development of the backend & web of i)Digital COVID-19 Community Support Team (CST) System, ii) Digital COVID-19 Sample Collection & Lab Result System, iii) Digital COVID-19 Patient & Hospital Management System)	2 months after signing contact
	3.	Design & Development of the web (Final) and mobile application of: i)Digital COVID-19 Community Support Team (CST) System, ii) Digital COVID-19 Sample Collection & Lab Result System, iii) Digital COVID-19 Patient & Hospital Management System) Handover the web and mobile application to Aspire to innovate (a2i) Programme.	4 months after signing contract
	4.	Run the pilot in 3 facilities partnership with DGHS & A2i i)Digital COVID-19 Community Support Team (CST) System, ii) Digital COVID-19 Sample Collection & Lab Result System, iii) Digital COVID-19 Patient & Hospital Management System)	4 Months after sining contract.
	5.	Produce Risk Zoning Maps	Weekly, Start after the Development of web system and Continue till assignment End date
	6.	Update zoning related data and analysis in the dashboard	Weekly, Start after the Development of web system and Continue till assignment End date
	7.	Updating population and travel-related data and analysis in the dashboard.	Weekly, Start after the

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			Development of web system and Continue till assignment End date
Person to Supervise the Work/Performance of the Service Provider	The vendor will be working closely with the Technology Team of Aspire to Innovate (a2i) Project. The Chief Technology Officer of the Technology Team will be responsible to review and approve the performance/activities.		
Frequency of Reporting	As indicated in the TOR		
Progress Reporting Requirements	As indicated in the TOR		
Location of work	☐ Exact Address/es *[pls. specify]* As indicated in the TOR.		
Expected duration of work	4 Months		
Target start date	3rd week of December, 2020		
Latest completion date	3rd week of April, 2021(Tentative)		
Travels Expected	Not Required		
Special Security Requirements	☐ Security Clearance from UN prior to travelling ☐ Completion of UN's Basic and Advanced Security Training ☐ Comprehensive Travel Insurance ☐ Others *[pls. specify]* ☒ N/A		
Facilities to be Provided by UNDP (i.e., must be excluded from Price Proposal)	☐ Office space and facilities ☐ Land Transportation ☒ Others as per TOR.		
Implementation Schedule indicating breakdown and	☒ Required ☐ Not Required		

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timing of activities/sub-activities	
Names and curriculum vitae of individuals who will be involved in completing the services	☒ Required ☐ Not Required
Currency of Proposal	☐ United States Dollars ☐ Euro ☒ Local Currency (BDT)
Value Added Tax on Price Proposal	☒ must be inclusive of VAT and other applicable indirect taxes
Validity Period of Proposals *(Counting for the last day of submission of quotes)*	☒ 90 days In exceptional circumstances, UNDP may request the Proposer to extend the validity of the Proposal beyond what has been initially indicated in this RFP. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Proposal.
Partial Quotes	☒ Not permitted
Payment Terms	

Deliverables	**% of payment**
1. Upon submission of inception report (15th days after signing the contract)	10%
2. Development, hosting and handover the system (Web only) of i)Digital COVID-19 Community Support Team (CST) System, ii) Digital COVID-19 Sample Collection & Lab Result System, iii) Digital COVID-19 Patient & Hospital Management System) (2nd month after signing the contract)	50%

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	3. Deliver the Final version of web and Mobile Apps of i)Digital COVID-19 Community Support Team (CST) System, ii) Digital COVID-19 Sample Collection & Lab Result System, iii) Digital COVID-19 Patient & Hospital Management System) (4th month after signing the contract)	40%
Person(s) to review/inspect/ approve outputs/completed services and authorize the disbursement of payment	Policy Advisor, a2i	
Type of Contract to be Signed	☒ Contract for Professional Services	
Criteria for Contract Award	☒ Highest Combined Score (based on the 70% technical offer and 30% price weight distribution) ☒ Full acceptance of the UNDP Contract General Terms and Conditions (GTC). This is a mandatory criterion and cannot be deleted regardless of the nature of services required. Non-acceptance of the GTC may be grounds for the rejection of the Proposal.	
Criteria for the Assessment of Proposal	Bidder must have adequate technical ability, resources, human resources and processes. As such, following are defined as minimum eligibility criteria: **<u>Minimum eligibility criteria for the firm</u>** • The Software firm must be registered for at least 3 years; • Must have valid Trade license, Certificate of Register of Joint Stock & Companies (RJSC) registration (if applicable), VAT and TIN certificate; • The firm must submit 2 years latest audited financial report; • The firm must have proof of minimum BDT 20 lac working capital per year reflected in last 2 years audited financials.	

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- The Firm must submit last two years (2018, 2019) financial audit report.
- Must have a minimum of 03 years of experience in ICT business focusing on web and mobile application-based software solution platform of which must have minimum 01 practical experience of developing web-based data visualization system.

Minimum Eligibility Criteria for the Key personnel:

CVs of the Team leader and key team members containing their experiences on relevant issues must be submitted with detailed proposal. Beside that the evaluation team is expected to fulfil the following qualifications:

Sl.	Key Position	No.	Required Minimum Qualification
1.	**Project Manager**		• **Minimum** Bachelor's in CS/CSE**/EEE/BBA or any relevant discipline** from any reputed university. • **Minimum 5 years professional experience in developing software and web applications.**
2.	System Analyst		• **Minimum Bachelors in CS/CSE/EEE or any relevant discipline** from any reputed university. • **Minimum 3 years professional experience in IT Industry (developing software & web applicartions).** **Minimum 2-year experience as system analyst.**
3.	Database Administrator		• **Minimum Bachelors in CS/CSE/EEE or any relevant discipline** from any reputed university. • **Minimum 3 years professional experience in database management.** **Minimum 1-year experience as database administrator.**

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	4.	Senior Software Engineer		• **Minimum Bachelors in computer science** from any reputed university. **Minimum 5 years' working experience in relevant field as Senior software Engineer.**
	5.	Mobile Apps Developer (android)		• **Minimum Bachelors in any computer science** from any reputed university. **Minimum 3 years' working experience in relevant field as Mobile apps (android) Developer.**
	6.	Software Engineer		• **Minimum Bachelors in any computer science** from any reputed university. **Minimum 2 years' working experience in relevant field as Software Engineer.**
	7.	QA Engineer		• **Minimum Bachelors in any computer science** from any reputed university. **Minimum 2 years of experience in relevant field.**
	8.	**UX Designer**		• **Minimum Bachelors in any** relevant **discipline** from any reputed university. **Minimum 2** years of experience **in related field as UI/UX designer.**
	9.	**Data Manager**		• **Minimum Bachelor's degree in Geography/ Geography & Environment/ Geographic Information Systems (GIS)/ Computer Science/ Statistics or any relevant discipline.** • **At least Five (05) years of relevant professional experience in geospatial, vulnerability analysis.** **Minimum three (03) years of experience in leading surveys, multiple assessments, including the design, data collection and analysis. Knowledge of analytical tools e.g. ArcGIS, QGIS, SPSS/Stata/R, Python 3x, Post greSQL and designing data collection platforms (XLS forms).**
	10.	**GIS Analyst**		• **Bachelor's degree (Bs/BSc) in Geography/ Geography &**

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			Environment/ Geographic Information Systems (GIS)/ Computer Science/ Statistics or related field. • **Minimum three (03) years of experience in vulnerability analysis.** • **Minimum Two (02) years of Experience in surveys and data collection, data analysis, database design, and analysis.** **Knowledge of analytical tools e.g. ArcGIS, QGIS, SPSS/Stata and designing data collection platforms**
	11.	**Data Collector**	• **Minimum bachelor's degree (Bs/BSc) in Geography/ Geography & Environment, Geographic Information Systems (GIS)/ Computer Science/ Statistics or related field.** • **Minimum One (01) year of Experience in surveying, data collection and data entry.**
	12.	**Documentation Expert**	• **Minimum Bachelors in any related discipline** from any reputed university. **Minimum 2 years of experience in relevant field.**

Note: Necessary document must be submitted to substantiate the above eligibility criteria. Consultancy firm that do not meet the above eligibility criteria shall not be considerate for further evaluation. The firm must provide CV's of all proposed personnel for the assignment, stating name, highest academic qualification, professional certification, length of experience, role/function or other related information.

<u>Technical Proposal (70%)</u>

☒ Expertise of the Firm

☒ Expertise of Key Personnel

☒ Methodology proposed in the technical proposal

Basis of Technical evaluation:

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Criteria	Weight	Max. Points
Technical	70	
1. Overall experience and Expertise of the organization/Firm		**15**
1.1: Experience of design, development and implementation experience of web portal in public/private sector **(Health, Nutrition & Wellbeing software solution platform)**		5
1.2: Organization Profile, administrative and financial management structure and strength		5
1.3: Experience of developing project using technology ArcGIS, QGIS, Python 3x, R, Post greSQL, ArcGIS dashboard management, Excel database development.		5
2. Expertise of Key personnel		**20**
2.1: Relevant experience of project manager		7
2.2: Relevant experience of System Analyst, Database Administrator & Senior Software Engineer, GIS Analyst, Data Manager		10
2.3:Relevant experience of Development & Support team		3
3. Methodology proposed in the technical proposal		**35**
3.1: Demonstration of the understanding of the assignment & proposed solution design for the technical development		12
3.2: Technical approach and methodology of the development work and System Piloting.		10
3.3: Proposed staffing and work plan with detailed staff engagement schedule		6
3.4:Change request/quality control (SDLC) mechanism		4
3.5: Risk Management & Overall flexibility		3

Financial Proposal (30%)

To be computed as a ratio of the Proposal's offer to the lowest price among the proposals received by UNDP.

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UNDP will award the contract to:	☒ One and only one Service Provider
Contract General Terms and Conditions	☒ General Terms and Conditions for contracts (goods and/or services) Applicable Terms and Conditions are available at: http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
Annexes to this RFP	☒ Form for Submission of Proposal (Annex 2) ☒ Detailed TOR (Annex-3) ☒ Written Self Declaration (Annex-4)
Contact Person for Inquiries (Written inquiries only)	***Please mention the following in the subject while sending any query to UNDP regarding this RFP on or before 25 November,2020. "Queries on RFP-BD-2020-044" to*** bd.procurement@undp.org Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.
Other Information *[pls. specify]*	A pre-bid meeting will be held **Online** for the clarification on the bidding document and ToR **on 26 November, 2020 at 11:00am using the following link:** Join Zoom Meeting: https://undp.zoom.us/j/82659652741?pwd=Q0l6dlkzcTR4NUh5U3Mya0dYZDVoQT09;

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Annex 2

FORM FOR SUBMITTING SERVICE PROVIDER'S PROPOSAL[1]

(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery[2])

[insert: *Location]*.
[insert: *Date]*

To: [*insert: Name and Address of UNDP focal point]*

Dear Sir/Madam:

We, the undersigned, hereby offer to render the following services to UNDP in conformity with the requirements defined in the RFP dated *[specify date]* , and all of its attachments, as well as the provisions of the UNDP General Contract Terms and Conditions:

A. **Qualifications of the Service Provider**

The Service Provider must describe and explain how and why they are the best entity that can deliver the requirements of UNDP by indicating the following :

a) Profile – describing the nature of business, field of expertise, licenses, certifications, accreditations;
b) Business Licenses – Registration Papers, Tax Payment Certification, etc.
c) Latest Audited Financial Statement – income statement and balance sheet to indicate Its financial stability, liquidity, credit standing, and market reputation, etc. ;
d) Track Record – list of clients for similar services as those required by UNDP, indicating description of contract scope, contract duration, contract value, contact references;
e) Certificates and Accreditation – including Quality Certificates, Patent Registrations, Environmental Sustainability Certificates, etc.
f) Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.

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[1] *This serves as a guide to the Service Provider in preparing the Proposal.*
[2] *Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes*

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B. **Proposed Methodology for the Completion of Services**

The Service Provider must describe how it will address/deliver the demands of the RFP; providing a detailed description of the essential performance characteristics, reporting conditions and quality assurance mechanisms that will be put in place, while demonstrating that the proposed methodology will be appropriate to the local conditions and context of the work.

C. **Qualifications of Key Personnel**

If required by the RFP, the Service Provider must provide :

a) Names and qualifications of the key personnel that will perform the services indicating who is Team Leader, who are supporting, etc.;
b) CVs demonstrating qualifications must be submitted if required by the RFP; and
c) Written confirmation from each personnel that they are available for the entire duration of the contract.

D. **Cost Breakdown per Deliverable***

	Deliverables ***[list them as referred to in the RFP]***	**Percentage of Total Price** ***(Weight for payment)***	**Price** ***(Lump Sum, All Inclusive)***
1	Deliverable 1		
2	Deliverable 2		
3	….		
	Total	100%	

**This shall be the basis of the payment tranches*

E. **Cost Breakdown by Cost Component** ***[This is only an Example]*:**

Description of Activity	**Remuneration per Unit of Time**	**Total Period of Engagement**	**No. of Personnel**	**Total Rate**
I. Personnel Services				
1. Services from Home Office				
a. Expertise 1				

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b. Expertise 2				
2. Services from Field Offices				
a . Expertise 1				
b. Expertise 2				
3. Services from Overseas				
a. Expertise 1				
b. Expertise 2				
II. Out of Pocket Expenses				
1. Travel Costs				
2. Daily Allowance				
3. Communications				
4. Reproduction				
5. Equipment Lease				
6. Others				
III. Other Related Costs				

[Name and Signature of the Service Provider's Authorized Person]
[Designation]
[Date]

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Annex-3

Terms of Reference
for
Hiring a firm for Development of a GIS based web and Mobile Apps(Android) for COVID 19 and Data Process Management.

A. Project Title: Aspire to Innovate (a2i)

B. Project Description

Aspire to Innovate (a2i), a whole-of-government programme of ICT Division, supported by Cabinet Division and UNDP, that catalyzes citizen-friendly public service innovations, simplifying government and bringing it closer to people. It supports the government to be on the forefront of integrating new, whole-of-society approaches to achieve the society. The objective of the project is to increase transparency, improve governance, and reduce the time, difficulty and costs of obtaining government services for under-served communities of Bangladesh. This is to be achieved by the following major 3 components of the project:
Component 1: Institutionalizing Public Service Innovation and Improving Accountability
Component 2: Catalyzing Digital Financial Services and Fintech Innovations
Component 3: Incubating Private Sector-enabled Public Service Innovation

C. Scope of Services, Expected Outputs and Target Completion

1. Background of the work:

The coronavirus COVID-19 pandemic is the biggest global health crisis of our time and the toughest challenge the countries are facing worldwide. Bangladesh is the most densely populated country in the world, with 2.5% of world population living in only 0.3% area. We are currently facing severe challenges to fight the pandemic. The existing system is struggling to cope with the rapid number of challenges raising with the pandemic situation. The simplest solution to stop the spread is a contact tracing, isolation and intervention. However, without proper data source and digital tools, it is impossible to implement the solutions to stop the spread of infection. The medical system of the country struggles with testing each and every suspected COVID patient for infection, to serve severely ill patients, and also, to serve critically ill patients who require lunge ventilators. It is of utmost importance that we manage the limited resources we have to the best of our abilities. We have the infrastructure that can utilize to mobilize our

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healthcare workforce to spread awareness about COVID-19, identify high risk patients from the suspected patients so we can reduce the burden on our healthcare system and provide better support to the people who need them the most.

2. Main Objectives of the assignment:

The objectives of the assignment are:

a) Design, develop & pilot a platform which will have Digital COVID-19 Community Support Team (CST) System, Digital COVID-19 Sample Collection & Lab Result System, Digital COVID-19 Patient & Hospital Management System.
b) Selection a methodology for zoning in the capital city, Dhaka, and the whole country, based on clustering in risk-areas where the parameters are derived from the intensity of the spreading of the virus.
c) Map for the movement range and travel pattern of the population within the country.

3. Scope of Work:

3.1 Design and Development Mobile Apps(android) & Web Application with Dashboard (Digital COVID-19 Community Support Team (CST) System, Digital COVID-19 Sample Collection & Lab Result System, Digital COVID-19 Patient & Hospital Management System).

d. Design & development of Digital COVID-19 Community Support Team (CST) System
    i. Web & Mobile application for Community Health Workers to visit, screen & follow up potential patients
    ii. Web & Mobile application for Area Managers that allows Area Managers to communicate, assign potential patients to Community Health Workers
    iii. Develop Dashboard of Digital COVID-19 Community Support Team (CST) System for viewing service statistics, visualize beneficiary data, download reports
e. Design & development of Digital COVID-19 Sample Collection & Lab Result System
    i. Web & Mobile application for sample collection system with payment verification & traveler module, lab result view & entry
    ii. Dashboard for the Sample Collection module for viewing service statistics, create beneficiary account, serve beneficiary from web dashboard & download reports
f. Design & development of Digital COVID-19 Patient & Hospital Management

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System

i. Web and Mobile application for the HopsitalHospital user for COVID-19 Patient & Hospital Management system to admit, follow up & discharge COVID patients, track selected hospital resources & view COVID patients in the Hospital
ii. Dashboard for COVID-19 Patient & Hospital Management System to track patient & hospital statistics from hospitals & view reports.

3.2 Pilot the Digital COVID-19 Community Surveillance System with Sample Collection System & COVID-19 Patient & Hospital Management Systems:

Vendor will work in partnership with DGHS & A2i to run a pilot for the systems in areas that are selected by DGHS.

3.3. Zoning in the capital city, Dhaka, and the whole country, based on clustering in risk-areas and Map for the movement range and travel pattern of the population within the country or between countries.

VII. Plotting positive case data into map according to the address
VIII. Prepare database in excel data format for further use
IX. Making clusters for defining different risk zones
X. Identify risk zone and demarcate the zone where needed
XI. Analyze public movement data
XII. Update dashboard with different map and statistical analysis

4. Technology Requirements

The systems will be developed for Android OS. The technological requirements for the development are listed below –

- Backend
  - Java Spring Framework
    - oAuth2 for authentication
    - REST APIs
    - Swagger for API documentation
  - Database
    - mySQL
- Frontend

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    - Android: Kotlin, Android SDK, React Native, Device SDKs
- Data Encryption
    - HTTPS for encrypted data transmission using TLS
    - GIS Mapping Tool
        - ArcGIS, ArcGIS Pro, QGIS
    - Data Analysis
        - Python3.x
        - R
    - Visualization tool
        - Apache Superset, ESRI Operation dashboard for ArcGIS, Super Map dashboard

5. **Institutional Arrangement**

The work will closely overseen by Chief Technology Officer, Aspire to Innovate (a2i) Programme.

6. Duration of the Assignment

Total Duration of the assignment is 4 Months starting from 3rd week of December,2020(Tentative)

7. Deliverables:

As per RFP Document

8. Supervision and Performance Evaluation:

The vendor will be working closely with the Digital Financial Service Team of Aspire to Innovate Project. The Team Leader of Digital Financial Inclusion Team will be responsible to review and approve the performance/activities.

9. Location of Work: Ba2i, ICT Division, Agaragaon, Dhaka, angladesh.

10. Minimum Eligability Criteria and Team Composition:

As per RFP document

11. Evaluation Criteria:

The evaluation process of selecting a farm farm will be based on technical (70) and financial (30) points. The technical criteria are as follows;

As per RFP document

12. Payment Schedule:

As per RFP document

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Annex-4

Declaration

Date:

United Nations Development Programme
UNDP Registry, IDB Bhaban, Agargaon
Sher-E-Bangla Nagar, Dhaka, Bangladesh

Assignment _____

Reference: RFP-BD-2020-044

Dear Sir,
I declare that ……. is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.

Yours Sincerely,