**ALARM APP: Terms of Reference**

British Red Cross of IFRC is hiring an experienced mobile application developer firm to develop a mobile application for the DEEPER project. The mobile application will be called **‘ALARM APP’**. The application will facilitate deployment of trained urban volunteers in response to an emergency and also coordinate the deployment of these urban volunteers. Below are the terms of reference for the mobile application development firm for the ALARM APP development.

1. **Background on BRC/ BDRCS**

British Red Cross of IFRC in consortium with German Red Cross, ACF and Christian Aid is implementing the Dhaka Earthquake Emergency Preparedness and Enhancing Resilience project through BDRCS. BDRCS has further signed an MoU with Fire Services and Civil Defense department to mainly train urban volunteers from various wards and to develop, use and maintain an ALARM app.

The DEEPER project and the previous projects have trained several Urban Volunteers in Dhaka South City Corporation wards. These volunteers are expected to support FSCD in the emergency response by reaching the site of incidence immediately and ensuring the initial actions are taken to minimize the damage. Once FSCD staff is at the site of incidence, the Urban Volunteers will work in coordination with FSCD. However, the immediate deployment and coordination of the volunteers has always been a challenge in absence of the reliable communication and coordination mechanism and linkage between the FSCD and Urban volunteers. The ALARM app is to be designed to bridge this gap. This DEEPER project is supported by European Civil Protection & Humanitarian Aid Operations.

1. **Summary of the problem that is being solved and the expected solution**

As stated earlier, mechanism to trigger deployment of urban volunteers and enabling their response by allowing them access to the information on secondary hazard, vulnerabilities and risks persisting in the vicinity does not exist. At the same time, the response can be effective if the urban volunteer’s deployment and the actions are carried out in a coordinated manner. What is missing at this stage is a mechanism which can allow communication between urban volunteers and the FSCD as well as the access to the information to urban volunteers which can aid their response to any disasters.

1. **Solution**

The ALARM app is expected to bridge this gap by allowing urban volunteers to trigger ALARM by using the mobile application when they sight any event which need urban volunteers and/or FSCD response. The trigger can be validated by the FSCD cCommand Control Center. (CCD) On validation of the trigger, the volunteers in the vicinity will get the message about the event allowing them to move to the site of the incidence and start responding. The validation will activate GIS maps on the mobile apps of the volunteers allowing them to see hazard, risks, vulnerabilities, capacities and resources which can help them in their response.

1. **High level functionality of the app**
	* User perspective: The user will be able to trigger an ALARM with the coordinates of site of incidence and short text about the incidence. On validation of trigger. They will get access to the risks and resources maps. App will allow urban volunteers to accept the deployment request.
	* Administration: The app will be administered by the BDRCS and the Command Control Centre(CCC) of FSCD. There will be two admin levels. One level will be assigned to CCC so that it can validate the triggers and can even raise trigger itself. The second level of admin will be to administer the urban volunteers access. The registration and authorization of app by the urban volunteers will be managed by this admin level.
	* Access *:* The app will be open to the trained urban volunteers only. Anyone other than urban volunteer won’t be able to access the app and its contents.
	* Expected integrations : The app is supposed to gather the data about location of the urban volunteers which at the end of the operation will help to analyze how many urban volunteers have responded to the incidence.
2. **Non-functional requirements**

The application should work on Android platform. The download of application from google app store is preferred. However, as this is a restricted access mobile application, the recommendation of the app developer will be taken into consideration.

1. **Data**

Risk and Resources maps: DEEPER project is developing GIS based risks and resources maps for 14 wards using ARC GIS. These maps should be integrated in the ALARM app. At present we are exploring two possibilities. The urban volunteers registered for the respective wards should have the maps downloaded on their mobiles so that once the trigger is validated, they should get access to the maps. Another option will allow volunteer to download risk and resources maps after the trigger is validated.

The app should collect coordinates(location), IMEI numbers of the mobiles, short messages about the trigger, and duration of engagement at site.

IMEI number of the device and the name of the urban volunteer, Risks and Resources maps, Log of triggers (Date, time, coordinates, description/short message, trigger validation: date and time and user).

The app should have appropriate security features to stop intrusion of virus or any other external program to interfere in its functioning and data management. The data stored, used, shared and received through the app should remain in a secured environment.

1. **Reporting requirements**

The app should have an option with admin level no. 2 to generate a report on the incidents, its triggers and responded volunteers.

1. **Quality assurance / performance expectations:**

The Mobile Application developer should provide maintenance of the mobile application for the period of three years from the date of commissioning. A bank guarantee of 5% of the contract value should be provided by the App developer as an assurance of service. The mobile application developer will also ensure that the mobile application and its data are hosted on cloud for at least five years. The necessary fees should be paid to the cloud services provider by the app developer on behalf of BDRCS and the necessary documentation in the name of BDRCS should be made available to BRC of IFRC. The mobile application developer should provide the Programme codes with logics details in a way that the application coding can be understood by any programmer in the future for update, maintenance and further development. The ALARM mobile application concept, program code and program logic will remain as an intellectual property of BRC of IFRC and its partner BDRCS. App developer will not have any rights on the Programme code and its logic as they are being financially compensated for the same as a fee for the development of the mobile application. The mobile application developer will agree that they will not imitate or sell the similar app to any other company, individual or institution and even should not make available the part or full program and its logic free of charge to anyone.

1. **On-going support expectations:**

The app developer is expected to carry out the fitness runs of the app every quarter and submit report of the same to BDRCS and FSCD. The errors and bugs in the app should be removed promptly within 24 hours to ensure that the app is functional 24X7 throughout the year.

1. **Any future phase expectations:**

There is a possibility that the risk and resources maps will be developed for remaining all wards of Dhaka City in the future. There should be easy step available within the admin levels to include these maps in the ALARM app. The app should support at least 20,000 users.

1. **Budgetary constraints**

This is a turnkey project where vendor is expected to provide complete solution.

If any licenses or subscriptions to be bought based on required, vendor should buy licenses in the name of Bangladesh Red Crescent Society.

Mobile app should be maintained and kept uprunning by the vendor all time during the first two years of deployment of app. In case of any issues with the functioning of the app which might be caused due to bugs, compatibility issues, issues with the code, etc, vendor should proactively address it. Vendor will provide a quote for maintenance of the app for two years in their bid. The equal amount of unconditional irrevocable bank guarantee will be submitted by the vendor which should be valid for the period of three years.

Payments will be made by IFRC/British Red Cross by online bank transfer after 30 days of satisfactory delivery/deployment of the ALARM app as per agreed schedule, after receiving the inspection report regarding the quality assurance (if applicable) and after receipt of the unconditional irrevocable bank guarantee for the maintenance of mobile application for the period of three years.

1. **Delivery timeline expectations**

After signing workorder, within first two (02) days a meeting should be held with the stakeholders to understand the app requirements and app expectations. An inception and feasibility report with detailed features of app should be submitted within first seven (07) days for feedback. The APP need to be developed and made available for the dry run within twenty (20) calendar days from the date of signing of work order. The app should be tested and debugged in following ten (10) calendar days. Within thirty (30) days from signing of workorder, the application should be made fully operational and brought in use.

The mobile application development and its features should be discussed with the commissioner of this contract and/or its appointed representative/s in the development phase on the regular basis to ensure the development of the application is on the right track and is meeting the requirements and expectations of the commissioner of this contract. The mobile application developer will test the application rigorously applying the highest standards available in the mobile application development industry. Once the testing is done and bugs are eliminated, the application can be tested with the relevant stakeholders in a controlled manner. Identified bugs if any should be removed promptly. Once this test is cleared, the application can be rolled out/deployed widely. Application developer and the stakeholders will work hand in hand to ensure smooth deployment and testing of the application at least for the period of two (02) months until the good confidence level is attained.

1. **Expectations from agency:**

Mobile application developer should submit the inception report stating the mile stones of the app development within the agreed time frame in order to ensure that the goals are achieved in a timely manner.

While producing inception report, the mobile application provider should interact with the commissioner of the said mobile application and other relevant stakeholders to extract the requirements and features of the application needed. The inception report should include blue print of the mobile application to be developed describing the features, functionality, limitations, software to be used and the milestones in the development of the application along with any other relevant information. On acceptance of the inception report, application developer should start the development of the mobile application.

The mobile application developer should adapt to any changes in the development phase arising due to the changed circumstances or requirements of the stakeholders.

1. **App Developer’s response**

It is expected that the mobile application developer does not work in isolation rather the application developer works in close cooperation and coordination with the commissioner of the mobile application contract. There should be a regular dialogue with the stakeholders to share the progress and discuss the features as they are incorporated in the mobile application.

1. **Payment:**

Within 30 days from date of receipt of goods with all supporting documents in order by the buyer, i.e. commercial invoice, signed delivery challan, Goods Received Notes. The successful supplier has to bring revenue stamp of BDT 10.00 (BDT ten only) with money receipt while collecting the payment from IFRC office.

1. **Bid Bond:**

Consultancy Firm(s) must submit along with their quotation a bid amount of 2.5% of the total quoted amount in the form of Pay Order (in favour of IFRC/Briitsh Red Cross from any scheduled bank. Cheque will not be accepted. Bid amount of unsuccessful bidders will be returned after placing the order(s) with the successful firm(s). Offers not accompanied with a bid amount will not be considered. Bid amount if taken back by any firm for any reason will render their quotation invalid. The purchase contract, if awarded within the quotation validity period, is not accepted by the successful bidder, the bid amount will stand forfeited.

1. **Security Money /Performance Bond:**

The successful firm(s) will have to deposit **10%** of the value of the order as performance security in the form of a pay order/demand draft from the schedule bank in favour of **IFRC/Briitsh Red Cross** at the time of signing the purchase order. This security money/performance bond will be refunded after one (01) with satisfactory service. If the service is partially cancelled due to the non-performance by the consultant, all rights of refund of security money will be forfeited.

1. **Pre-Bid Meeting :**

A Pre-bid meeting will be held at 11:00-12:00 on 22 February 2021 over Zoom meeting. The interested bidder (s) are requested to send an email for getting Zoom link to saifulislam@redcross.org.uk before 11am, 22 February 2021.