Terms of Reference - Short Term assignment for Designing Web Based Modules for FDMA

1. Background

Merged Area Disaster Management Authority (hereinafter refer to as FDMA) which was called FATA Disaster Management Authority (FDMA) but after constitutional amendment in 2018 whereby FATA agencies were merged and hence the name of FDMA has changed and new name is Merged Area Disaster Management Authority (MADMA) though in this document it is referred as FDMA www.fdma.gov.pk. Established under National Disaster Management Act 2010, FDMA is an Apex Public Sector Authority on disaster preparedness, response and early recovery initiatives in Merged Areas. The core purpose of FDMA is to design, plan, implement, coordinate, monitor and evaluate humanitarian response. One of its primary and significant function is coordinating humanitarian organizations and governments departments and ministries for effective response. In order to establish efficient and capable emergency response system on regular basis, technology and updated equipment is indispensable for FDMA strengthening.

Concern Worldwide in Pakistan in Partnership with the NGO (hereinafter referred as NGO) with funding support of USAID/OFDA to perform Institutional strengthening of FDMA. Concern Worldwide is a non-governmental, international, humanitarian organization dedicated to the reduction of suffering and working towards the ultimate elimination of extreme poverty in the world's poorest countries. Concern has been working in Pakistan since 2001, implementing emergency response, resilience and long term development program across the country.

NGO is doing business in Pakistan, successfully performed multiple institutional strengthening projects with FDMA and PDMA. It is registered with Social Welfare Department Govt. of KPK and has MoU with Economic Affairs Division Govt. of Pakistan.

2. The Project

Usual fault lines in disasters response is efficient flow of information that impedes timely and responsive decision making. Disaster response necessitates effective management of large data load and knowledge. This includes data on projects, project in pipeline, damages to buildings, human losses, physical damages, weather and geographical info etc. Disasters create opportunities for multiple organizations including consultants, NGOs, INGOs and government agencies. As multiple projects and interventions moves in therefore better coordination is required and coordination always hold interdependent relationship with efficient flow of information. FDMA needs to keep itself abreast of humanitarian interventions to avoid duplication, ensure optimum use of resources and push for better reach out to vulnerable groups/ population.

There is an evident need for FDMA to have robust access to updated data of humanitarian organizations starting from application for NOC, Progress Monitoring of interventions, digital/automated online disaster compensation and swift access to files to track and control flow of correspondence/communication and its completion.

To mitigate against natural hazards, well defined disaster management information system is an imperative. Research suggests that web based software/modules expresses better potential for preparedness and effective disaster response. The NGO has been working with FDMA and PDMA on DMIS, Monitoring and Evaluation capacity building. In this case the requirement is to develop four specific modules that addresses explicit needs of efficient and effective disaster response. It should meet the requirements of the users at multiple levels working in diverse locations.

3. Objectives of the Project

Concern Worldwide through partnership with NGO is implementing this project; under this partnership agreement the NGO and FDMA has signed MoU to ensure smooth implementation according to agreed role and responsibilities. NGO and FDMA has been working together towards effective disaster response by strengthening Institutional Capacity of FDMA for many years. As part of this strengthening process the NGO has performed various capacity building interventions, designed software/modules for FDMA use. This Project aims to;

a.   Developing online system for submitting request for NOC by humanitarian aid organizations.
b.   Progress Monitoring Module for Humanitarian organization working in Merged District (Ex-FATA) so that FDMA can access real time data whenever it requires.
c.   Developing Disaster compensation module for FDMA use so that compensation details are available online.
d.   Developing File Tracking system for FDMA internal use. Training of FDMA on the above mentioned modules.
e.   Pre and Post Consultative Workshops with Humanitarian Aid Organizations and other stakeholders to solicit their feedback for these above mentioned modules.
f.   The four modules must also has the option to do archiving for last five years data.

3.1   The Assignment/ Deliverables

The system should be able to provide an effective IT based solutions. The NGO will provide FDMA a dedicated line and Internet Server for uploading and optimally functionalizing online modules/software. Two desktop computer, printer cum scanner will also be provided to FDMA to support delivery of this assignment. IT Server will be procured after consultation with the consultant/firm contracted for this assignment.

General Guidelines/Deliverables

- Provision of Entity Relationship Diagram (ERDs) and Data Flow Diagram (DFD) and their levels for all four modules.
- Consultant under guidance of FDMA and The NGO will develop guidelines for user ID and its privileges. Having authorized administrator super user who have to make rights to make major changes. This authorized administrator holds the right to permit and disallow request for tasks.
- Ensure that sufficient security safeguards are embedded in modules/systems as the below mentioned Online modules contains confidential data about aid organizations, data of financial assistance to be or paid to disaster impacted population and their personal data.
- The Consultant will provide two months after sale service including minor changes.
- FDMA staff should be adequately trained on all Modules before formal handover
- Use AGILE methodology
- Ensure that below mentioned four modules are developed in computer language/software that is compatible with similar public sector organization, UN cluster. Public Sector/Organizations can use this data after approval from FDMA who hold the copyright of these modules.

- All the below mentioned modules should have archiving facility also.
- The module must be in a presentable, user friendly, colorful so that user finds it attractive and convenient to work in.
- The four modules should also provide guidelines for using these modules and also provide FDMA policies on NOC, Progress Monitoring, disaster compensation and file tracking.
- We believe in Gender Mainstreaming, protection mainstreaming and inclusion of older people and people with disability therefore adequate approaches and tools needs to be in place to ensure implementation of policies regarding gender, protection and inclusion.
- Dynamic Report Generation e.g. bar chart, pie chart etc. so that FDMA has access to accurate data for informed decision making.

Consultant can be asked to advice on new features or FDMA may assign him/her for adding similar new features not mentioned in this TOR.

a. The envisioned online NOC module for Humanitarian Aid Organization or visitors will have following features.

I. Conduct Consultative workshop to solicit humanitarian organizations feedback before designing and installing the modules. Consultant will generate a brief report of the Consultative workshop.

II. Design responsive interface, smart electronic devices compatible that is user friendly to register basic data to apply for NOC by NGO/Humanitarian Organization. NGO are uploading the required data for processing NOC e.g. Work Plan, Budget, Audit Report, Certain Pages of Grant agreement or any other information required by FDMA.

III. Consultant has developed tools and templates for online application.

IV. Humanitarian Organization/NGOs are able to track the NOC movement progress online.

V. Humanitarian Organization/NGO can be notified online if any data is missing or further data is required.

VI. Online NOC application Module is linked to Progress Monitoring Module e.g. once NOC is allowed so its status will automatically updated towards Progress Monitoring module.

VII. Train FDMA and Project IT Specialist on the module and make sure that it pilot testing is done by uploading applications of 5 humanitarian organizations/NGOs NOC.

VIII. Consultant/Firm will also carry out consultations with PDMA to ensure that NOC module has best compatibility with modules in other Public Sector Disaster Management Authorities in KPK.

IX. Make sure that this new NOC module is not in conflict with any of the web based, DMIS of FDMA and other Public Sector Disaster Management Institutions.

X. Record data of the proposed/ongoing projects of the partner NGO for which NOC is required

XI. Dynamic, graphical presentation (bar chart, pie chart) of report generation of registered NGOs, NOC status, cluster, volume of funds, target beneficiaries, gender segregated data of projects being executed. This option is for exclusive FDMA use. Humanitarian Aid Organization can obtain this data on request from FDMA.

XII. Conduct Orientation/Training for Humanitarian Organizations on the newly developed NOC module.

XIII. Travel NOC updates are for exclusive use of FDMA. Travel details of visitors will not be available on dashboard to general public or non-FDMA stakeholders unless authorized by FDMA.

XIV. Organizations/Individuals aspiring NOC for travel will submit online request for NOC showing its purpose, geographic locations, and details of travelers and tenure of the visit. Once travel NOC is approved it will be uploaded on system by FDMA and an automatically generate email will also go to applicant that their NOC is approved or not-approved.

XV. Each applying organization will sign in first with their email ID as login and password. Travel application can also launched through the same sign in/login in procedures.

b. The envisioned Progress Monitoring Module for Humanitarian Aid Organization will have following features

I. Conduct Consultative workshop to solicit humanitarian organizations feedback before designing and installing the modules. Consultant will generate a brief report of the Consultative workshop.

II. Through an interface the Humanitarian Aid Organizations are able to upload weekly targets and achievements i.e. 3Ws- What has been done? Where it has been done? Who has done it? When it is done?

III. The Module will be in line with Strategic Focus of FDMA with regard to geography and theme.

IV. Consultant has developed tools and templates for online uploading progress/achievements on weekly basis.

V. FDMA and Humanitarian aid organizations are able to see the progress online e.g. who is doing what, when and where.

VI. Humanitarian Organization/NGO can be notified online if any data is missing, wrongly presented or further data is required. The system will generate automatic reminder if Aid Organization has not reported or wrongly reported progress.

VII. Progress Monitoring Report is linked to NOC module e.g. humanitarian aid organization will be informed through automatically generated email that NOC is expiring in a month time so either NGO/Aid organization apply for extension or start close out phase.

VIII. Train FDMA and The NGO IT Specialist on the module usage, The consultant make sure that that pilot testing is also done i.e. 15 humanitarian organizations/NGOs has done weekly Progress Monitoring. FDMA will lead in asking NGOs to report progress.

IX. Consultant/Firm will also carry out consultations with PDMA and UN clusters to ensure that Progress Monitoring Module has best compatibility with similar Modules in other Public Sector Disaster Management Organizations and UN.

X. Make sure that this new Progress Monitoring module is not in conflict with any of the web based, DMIS of FDMA and other Public Sector Disaster Management Institutions or UN systems.

XI. Record data of the proposed/ongoing projects of the partner NGO.

XII. Dynamic and Graphical Report Generation of registered NGOs, NOC status, project closing, cumulative performance, progress status, projects being executed etc.

XIII. Conduct Orientation/Training for Humanitarian Organizations on the newly developed Progress Monitoring module.

XIV. Data of Project closed can also be accessed

c. The project plans to develop file tracking system for FDMA;
This is a web based module which helps in tracking the movement of files and receipts. The system has been designed in such a manner that the controlling authority can view the movement of the documents and could take timely and appropriate decisions. The module will have following features but further refinement/addition can be done during design phase.

I. A study of the organization structure and existing/previous File Tracking system in use. Where the File tracking system is supposed to be implemented. This will help out decide user roles and the work flows in the organization

II.   An overall hierarchy of the employees, departments and units of the organization must be maintained in this system. A more automated process should be, like it must have Active Directory integration support.

III.   This system will track of the movements of files from one desk to another inside the department, files moving from one department to another, Letter/File or receipts moving from organization to any other organization, the record of file sent from organization through TCS, UMS or through any other transportation option.

IV.   Various types of reports must be generated through this system. For example: Document sending/receiving report, Letter sending/Receiving report and many more. It must also have a very powerful searching technique for the current location of files. The system must also be compatible with modern devices and technologies and must have fully interoperability with the existing Information Systems and their modules. This part is very necessary as the File tracking module needs to work with other modules of the organizational information systems.

V.   The module must have capability to adopt different changing needs with regards to different reporting or overall organizational policy changes. It must provide the customizable options which could help incorporate the changing needs easily without going for re-coding or development.

VI.   The system is required to assist the organization in achieving their objective of an efficient, effective, and user friendly file tracking system. This will provide an environment where the user can track the whole life cycle of the movement of the file i.e. current location of the file, or who has initiated the file and remarks on file at different stages.

VII.   The proposed system must be developed using the latest software engineering tools and techniques and it must adapt to a framework that provides a clean separation of the UI, Business Logic, Model or Data. This will help parallel development and will have many more benefits in future for the organization in maintaining their information system.

VIII.   Group and user level security access rights to all available options in the File tracking system.

IX.   FTS must be capable of maintaining User activity and transaction level logs, security logs and application logs.

X.   Should have complete record of history related to a file for the purpose of audits and reconciliations for any disputes that could arise.

XI.   Must maintain acknowledgement and alerts so that targeted recipient of any document could timely respond.

XII.   Fulfill all needs from audit's point of view for any activity in information system, including storing, altering, deleting or accessing any part of information system and its components.

XIII.   FTS must support scalability so that the growing number of staff, org units, department or growing data should not hinder its performance but more users can be added to have better outreach.

XIV.   FTS must be platform independent and must support for auto and manual backups. The backups must even go at transactional level.

XV.   The FTS must be fully tested with the maximum number of users, keeping in view all present and incoming future scenarios.

d.   Disaster Compensation Module
FDMA Guidelines for compensation policy 2103 will be the lead book for implementation of this module. Definitions of Disaster, procedures, competent authorities, templates mentioned/given in the book are authentic and valid. We envision following features for this module

I.   Each designated Facilitation Center as mentioned FDMA policy 2013 will register the affected person and his/her damage claim on prescribed template along with prerequisite documents to be uploaded

with application. The facilitation center will issue an acknowledgement receipt indicating registration number.

II. Develop online interface for submitting Disaster Compensation to the affected population.

III. Module has options to select the nature of damage as mentioned in the FDMA/FDMA guidelines 2013.

IV. Template is developed for Humanitarian Aid organizations to share house hold level list for services provided to them as this will help FDMA to ascertain services provided to household in each agency.

V. Module has capacity for uploading scan copies of document/templates that are pre requisite for disaster compensation.

VI. Procedures and approving authorities are able to make online approvals for disaster compensation request as per FDMA 2013 policy.

VII. The module will detail disbursements approved by FDMA to disburse through respective merged districts along with list of households, their nature of damage and compensation approved as per FDMA 2013 policy.

VIII. The module will also make reference to dates and venue of meeting of Sub-Divisional Assessment Committee and Agency Steering Committee as described in compensation policy 2013.

IX. The module will also depict false claims through dashboard or reports as deemed necessary by FDMA.

X. The module will have option to upload summarized Ex-Gratia assistance proforma 1 to 5.

XI. The module will provide online household wise, tribe wise, tehsil wise, agency wise and category wise reports of compensation provided to affected people as per FDMA policy.

XII. The module will generate various dynamic reports e.g. graphical, pie charts, bars etc. These dynamic report will be agency wise, category wise, gender wise, age wise etc.

4. Deliverables.

I. Humanitarian Aid Organizations/NGOs/visitors are uploading request to FDMA for NOC along with required documentation.

II. FDMA has access to real time progress of Humanitarian Aid Organizations i.e. weekly updating of 4W matrix by Aid Organization, targets vs achievements and plans for next week.

III. FDMA, Agency Coordinators, district/agency level facilitation centers have access to online data pertaining to Disaster Compensation. FDMA, Agency Coordinators and Facilitation Centers can conveniently record online disaster compensation paid to affected people.

IV. FDMA management is able to efficiently track file movement within FDMA.

V. FDMA has access to dynamic reports-NOC Module, Progress Monitoring, Disaster Compensation and File Tracking.

5. Reporting Line:

- Primary Reporting line is FDMA's Director Relief and Operations
- FDMA's Assistant Director IT will be the focal point along with Project/NGO IT specialist
- Reporting to The NGO Project Coordinator through Project IT specialist
- FDMA's Assistant Director Relief and Operations.
- Final approval of work is contingent to Director Relief and Operations or DG FDMA.

6. Basis/Reference Material available.

I. Module developed by FDMA e.g. FDMA has NOC module but went redundant due to some technical issues. Similarly FDMA has file tracking and other modules also. These modules holds potential to support the consultant.

II. Module developed by PDMA for NOC http://www.pdma.gov.pk/nocs, Progress Monitoring, Disaster Compensation http://www.pdma.gov.pk/content/damageslosses and File Tracking.

III. The Consultant can also access reports, TORs of similar assignments by FDMA.

IV.   We believe in Gender/protection Mainstreaming, inclusion of older people and people with disability therefore adequate approaches and tools needs to be in place to ensure implementation of policies regarding gender, protection and inclusion. Policies booklet/manual will be provided to the consultant at the outset of the assignment. This booklet/manual will comprise guidelines, policies and tools.
V.   FDMA/FDMA Disaster Compensation Manual/Policy 2013.
VI.   FDMA NOC application checklist.

7.   General Terms and Conditions

The Consultant/Firm is required to look after all their logistical needs by themselves.

- Consultant/firm will be using its own IT equipment.
- Consultant/firm will his own vehicle for local transportation. FDMA may decide to provide vehicle for field visits.
- Consultant can use Wi-Fi services available in The NGO office and FDMA
- Any risk or liability that arise from this assignment, nor is any health or life insurance is covered.
- The Consultant after signing the contract will provide a detail work plan/Gant Chart for completing the assignment.
- Consultant may be required to visit merged districts but his/her visit is contingent to FDMA travel/visit approving mechanism/policy.

8.   Duration of the consultancy

The services of the consultant will be required for two month from date of signing of the contract.

9.   Disbursements will be deliverable based though upfront partial payment for project start up can be negotiated.

10.   Desired Qualification

- Minimum Bachelor's (Hons)/ Master Degree from reputed university in Computer Science required.
- Can evidence minimum 5 years' experience after degree in web and software development.
- Demonstrated knowledge and experience of web technologies, such as HTML, CSS, JavaScript, jQuery, databases and PHP/MySQL.
- Can evidence minimum 3 years of similar assignment with Public Sector Organization of same mandate e.g. FDMA, NDMA and PDMA etc.
- Ability to work independently and multi-task effectively.
- Demonstrated understanding of projects from the perspective of both client and business.
- Flexible and willing to accept change in priorities as decided by FDMA.
- Strong attention towards detail.
- Ability to work under pressure.
- Good Report Writing skills.
- Can facilitate workshops and Focus Group Discussions.
- Software houses can also apply provided they are complaint with state tax laws, having appropriate registration with state authorities. Software house to share a CV who will be primary technical focal point for this assignment. Contract will be signed with software house.

NGO and FDMA has the right to accept or reject bids without assigning any reason.