Mercy Corps Indonesia

SCOPE OF WORK CONSULTANT

Consultancy Title	: Management Information System (MIS) Consultant
Project	: INVEST DM
Location(s)	: Jakarta, Sentul (West Java)

BACKGROUND

Indonesia's overall development has resulted in an enabling environment for Indonesia's disaster management agencies to be independent, responsive, proactive, and able to prepare and respond to disasters in a way that reduces adverse impacts.

Badan Nasional Penanggulangan Bencana (BNPB) is present as an institution that is expected to be able to carry out the functions of coordination, planning, and implementation of disaster management activities in an integrated manner, starting pre, during and post disaster that include prevention, preparedness, emergency response, and recovery. Until last twelve years, BNPB has made significant progress in the formulation and determination of disaster management policies; implementation of policies and good practices of the policies formulated; disaster management by prompt actions, precisely, effectively and efficiently; coordinating the implementation of disaster management activities in a planned, integrated and comprehensive manner with related cross sectors; and the development of strong international relations and integrating global best practices in the framework of institutional arrangements, early warning systems, coordination, response management, and disaster risk reduction.

The INVEST DM, a USAID funded the program, is present to provide a holistic approach that support BNPB in carrying out its roles and duties to fill gaps in several areas, including increasing technical capacity starting from preparedness, response, and recovery; policy planning and development; governance / institutional; and organizational development. All of this boils down to one aspect, namely the development of human capital.

The main objective of the INVEST DM Program is to strengthen the capacity of disaster management agencies in Indonesia and resources at various administrative levels so that they are able to fulfill their mandate in providing effective and life-saving disaster management services.

The Disaster Management Education and Training Center (Pusdiklat PB) as one of unit work of BNPB has a mandate to support capacity building of human resources in disaster management. One infrastructure to support Pusdiklat PB to carry out its mandate is management information system (MIS) as the basic for data and information processing to support the training planning and decision making. A study on the functionality of MIS Pusdiklat PB has been conducted with sequence of activities by direct collaboration with the Division for Management of Technology and Network for Center of Data, Information and Disaster Communication (Pusdatinkom). The study have resulted the recommendations to enhance the performance of MIS Pusdiklat PB that classify as the short term and long term one.

An active MIS for Pusdiklat PB is very urgent to answer the needs of education and training on disaster management. The mandate of Pusdiklat PB on DM will smoothly expand and accelerate by availability data and information for decision making which manage through MIS.

OBJECTIVE OF CONSULTANCY

The purpose of this consultancy is to implementing the short term recommendations based on study of MIS Pusdiklat in effort to accelerate the functionality of MIS Pusdiklat PB in support the management decision making on DM training activities. The function enhancement of MIS Pusdiklat PB will focus on two main information systems that are SIDIKLAT and website pusdiklat.bnpb.go.id. At the end of consultancy process the guidelines will be provided for related MIS operational and training for Pusdiklat personnel.

The MIS Consultants will collaborate with Division for Management of Technology and Network under Pusdatinkom where the MIS of Pusdiklat PB attached to. A very close collaboration with IT staff, Division for Program and Evaluation, and Division for Education and Training Implementation of Pusdiklat PB.

ACTIVITIES

The consultants are expected to take the lead in upgrading and revamping the Pusdiklat's MIS as well as to train Pusdiklat's staff on maintaining the new revamped systems. The activities include but not limited to:

1. **The implementation of the identified short term recommendations from the Review of Pusdiklat PB MIS Report. This implementation will be targeting 2 (two) main information system of Pusdiklat PB, SIDIKLAT and website Pusdiklat.bnpb.go.id.**

   - Integrating all applications under 1 (one) label/branding
   - Upgrading SIDIKLAT and Pusdiklat's website to the most current version of Laravel and migration of them into new servers to accommodateadditional features for dashboard, report, SSL certificate.
   - Developing additional features for reports according to the needs of the Program and Evaluation Sector (11 reports) as well as for the Implementation of Education and Training (4 reports), authorization features as necessary, as well as more inclusive reports by incorporating data and reports from the aspects of user disabilities and accessible contents to groups with disabilities.
   - Developing a Dashboard to visualizePusdiklat Indicators to address theneeds of the Head of Pusdiklat PB
   - Developing Webservice/API (Application Programming Interfaces) forSIDIKLAT and Pusdiklat Web to enable the integration of e-Tangguh, LMS, open edX e-Learning, and others.
   - Redesign and provide technical assistance in upgrading MIS
   - Improve usability and user experiences in all MIS, e-Tangguh (LMS, e-Learning Platform) with consideration of inclusivity

2. **Testing of the enhanced MIS**

   A user acceptance test (UAT) of the enhanced MIS of Pusdiklat PB (SIDIKLAT and website pusdiklat.bnpb.go.id) is conducted. The testing isto ensure its stability, relevance, and user-friendliness. The system fix and enhancement conduct based on input and approval of unit works of Pusdiklat PB and by consider advice from Pusdatinkom unit.

3. **Training of Pusdiklat PB BNPB staff on MIS**

   Conduct training on MIS (SIDIKLAT and website Pusdiklat.bnpb.go.id) for Pusdiklat Staff. The IT and relevant staff of Pusdiklat that responsible for MIS operation trained on data management, training management, and how to supply data management as the input for decision making.

TIMEFRAME / SCHEDULE

The timeline is 2 (two) months after signing the contract.

Tasks/Milestones	Deliverables/Outputs	Resources	Timeline
Detailed document collection for features improvements and enhancements. Have discussions with all stakeholders	Documents of Software Requirements Specifications	1 MIS Expert / Team Leader 1 Senior Back End Engineer	Week 1
Analysis of features improvements and enhancements: a) details of what features and modules will be improved and what features will be added b) improvement technical documents: srs, activity diagrams, database schema c) presentation of analysis results	Report containing re-design of Application Architecture, Activity diagrams, and database schema	1 MIS Expert / Team Leader 1 Senior Back End Engineer 1 Back End Engineer 1 Front End Engineer	Week 1
Coordination with Pusdatin regarding server and domain	Availability of new server and domain to accommodate the requirement of MIS	1 MIS Expert / Team Leader 1 Senior Back End Engineer	Week 2
Migration of software version and server: a) update the version of the software (framework) MIS b) migrate MIS to a new server that has been provided by Pusdatin c) setup domain in a new brand (eg. E-Tangguh) d) test migration	MIS deployed on a new server and in the latest software framework conditions. The output is tested with Pusdatin. Domain already uses SSL	1 MIS Expert / Team Leader 1 Senior Back End Engineer 1 Dev Ops Engineer	Week 3
Low-fidelity mockup (balsamiq format) for overall improvements and enhancements to MIS features which will be presented to all stakeholders and tested	Approved low-fidelity mockup by all stakeholders	1 MIS Expert / Team Leader 1 Senior Back End Engineer 1 Back End Engineer 1 Front End Engineer	Week 3
High-fidelity mockups (html format) for overall improvements and enhancements to MIS features which will be presented to all stakeholders and tested	Approved high-fidelity mockup by all stakeholders and good result in usability testing	1 MIS Expert / Team Leader 1 Senior Back End Engineer 1 Back End Engineer 1 Front End Engineer	Week 5
MIS features improvements and testing: a) redesign of the appearance of the website as a Pusdiklat portal	Improved MIS features and approved testing result	1 MIS Expert / Team Leader 1 Senior Back End Engineer 1 Back End Engineer	Week 7

Tasks/Milestones	Deliverables/Outputs	Resources	Timeline
b) feature improvements on the website: data that are not connected to the SIDIKLAT database c) feature improvements in SIDIKLAT: GIS		1 Front End Engineer	
MIS features enhancement/additional and testing: a) create the required API between MIS and e-learning b) features enhancements c) additional features	Enhanced and/or added features are tested and approved testing result	1 MIS Expert / Team Leader 1 Senior Back End Engineer 1 Back End Engineer 1 Front End Engineer	Week 7
Take the necessary corrective measures on the worked MIS improvements and enhancements	Approved final version by all stakeholders	1 MIS Expert / Team Leader 1 Senior Back End Engineer 1 Back End Engineer 1 Front End Engineer	Week 7
User Acceptance Test (UAT) and installation on a new server	UAT Testing Result Report and the launching of the Pusdiklat MIS. This new version can be accessed via the public internet	1 Senior Back End Engineer 1 Back End Engineer 1 Front End Engineer	Week 8
Write user manual and deliver training for MIS users	User manual and 5-day training delivered	1 MIS Expert / Team Leader 1 Senior Back End Engineer 1 Back End Engineer 1 Front End Engineer	Week 8

REPORTING

In discharging services requires by this Contract, the Consultants will work under the direct supervision and report to Mr. Bill Ho, Director and Manager Project of Asian Disaster Preparedness Center (ADPC) Bangkok as a team work under INVEST DM and in close collaboration with other INVEST DM Team members in Indonesia to ensure compliance with assignment.

Close supervision and support will be provided by INVEST DM. The selected consultants are expected to engage in day-to-day communication with INVEST DM, Pusdiklat PB and Pusdatinkom. The selected consultant shall maintain an effective working relationship and consolidate the methodology to ensure that the work is thoroughly understood by the Pusdiklat PB.

INVEST DM will facilitate communications throughout the period of the contract, and shall actively participate in coordination, oversight, and implementation of this work. This may include adjustments in implementation as deemed necessary by INVEST DM.

REQUIRED EXPERIENCE & SKILLS

- University degree in Computer Science or related field such as Information Technology, Management Information Systems or other engineering discipline.
- At least 5 years' experience with demonstrated results in the majority of the following areas: Software development, Information Technology, Information Systems etc.
- Experience in developing MIS for Governmental Bodies would be an advantage
- High standards of behavior and a commitment to high professional performance
- Strong understanding of IT needs and issues of institutions
- Ability to work in a collaborative and team environment
- Excellent report writing skills in Bahasa and English

TO APPLY

Interested consulting firms could email their proposal to procurement@id.mercycorps.org with subject "MIS Consultant_INVEST DM" before September 18th, 2020. The proposal should include:

- Proposal with methodologies, key activities, timeline, team structure, and budget
- CVs from team members
- Company/Organization Profile

Only shortlisted candidates will be contacted.

Thank you,
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