

PROPOSAL FOR RENEWAL OF MULTI-HAZARD EARLY WARNING SYSTEM (IRISE UP)

I. RATIONALE

The Republic Act No. 10121 known as the Philippine Disaster Risk Reduction and Management Act of 2010 defines Early Warning System (EWS) as the set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

A people-centered early warning system necessarily comprises four (4) key elements: (1) knowledge of the risks; (2) monitoring, analysis and forecasting of the hazards; (3) communication or dissemination of alerts and warnings; (4) and local capabilities to respond to the warnings received. The expression "end-to-end warning system" is also used to emphasize that warning systems need to span all steps from hazard detection to community response.

II. PROJECT DESCRIPTION

The project aims to extend the service for the existing multi-hazard impact-based monitoring and early warning system which was procured by Quezon City Disaster Risk Management Office (QCDRRMO-22-IT-473).

Below are the components of the project that require extension of service to ensure system availability and achieve excellent service level to its stakeholders.

- **One (1) year maintenance, warranty and technical support of cloud-based applications** including supply and processing of environmental datasets
- **One (1) year data backup and redundancy** for data management systems (cloud-based and QCITDD).
- **One (1) year meteorological and data science support** that must be readily available 24/7
- **Two (2) days end user orientation and documentation** of five (5) Emergency Operations Center (EOC) personnel for system admin and end user training, processing of datasets, weather data, and generation of reports (PDRA and Daily Weather) .

The system has become vital for making critical decisions related to disaster risk reduction and response. It is critical to extend the services to further mitigate the

impacts of climate change to continue to protect the lives of our citizens and help businesses and communities adapt to our rapidly changing environment.

III. **TECHNICAL SPECIFICATIONS**

Lot	Description	Delivery Time
1 Lot	<p>ONE (1) YEAR MAINTENANCE, WARRANTY AND TECHNICAL SUPPORT OF THE FOLLOWING CLOUD-BASED APPLICATIONS INCLUDING SUPPLY AND PROCESSING OF ENVIRONMENTAL DATASETS:</p> <ul style="list-style-type: none"> • Data processing and storage of all environmental datasets in a cloud-based data management system • Processing, Supply and Integration of additional supporting datasets (environmental intelligence data) such as Weather Observations, Weather Forecast, Typhoons (PAGASA, JTWC, JMA), PAGASA CAP Alerts, Earthquakes, and Air Quality, Lightning Strikes (at least 95% lightning detection efficiency of CG lightning), Dangerous Thunderstorms (up to 45min early detection of Dangerous Thunderstorms), historical weather data and indices such as mosquito activity analysis data. • Community Portal with Local and National Multi-Risk Analysis • Timely, accurate, localized, and concise automated Pre-disaster Risk Assessment (PDRA) reports to identified locations. • Early warning updates of existing sensors and forecasted meteorological and earthquake hazards through existing telegram group chat. • Automated weather animations two (2) times daily containing processed data for local weather observations, weather forecast, PAGASA Radar, PAGASA GFA & TC Advisories, Mosquito Activity and Air Quality. • Updates and upgrades for existing IRISE UP mobile application (IOS and Android) and public web application. • Application Program Interface (API) for existing sensors and processed datasets. • Knowledge transfer on processing of data. <p>ONE (1) YEAR DATA BACKUP/REDUNDANCY</p> <ul style="list-style-type: none"> • Data dumps are to be performed every 15 minutes or shorter (all details pertaining to access to the QCDRRMO database such as address or URL to a management console, userid and password are to be given to QCDRRMO). 	<p>Thirty (30) Calendar Days</p>

	<ul style="list-style-type: none"> Perform redundant data writes to an ITDD database <p>ONE (1) YEAR METEOROLOGICAL AND DATA SCIENCE SUPPORT</p> <ul style="list-style-type: none"> One (1) dedicated on-site meteorological and data scientist for one (1) year that is readily 24/7 available for concerns. Names and contact details must be provided In-charge on analyzing, interpreting, and explaining highly technical data to QCDRRMO. <p>ORIENTATION AND DOCUMENTATION</p> <ul style="list-style-type: none"> Two (2) days end user orientation for processing of datasets, weather data, and generation of reports (PDRA and Daily Weather) . All trainings will have eight (8) hours per day with five (5) attendees. 	
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IV. PROJECT STANDARDS AND REQUIREMENTS

Bidders should have completed, a single contract that is similar to this Project or related to Supply, Installation and Maintenance of Internet-connected devices, equivalent to at least fifty percent (50%) of the ABC three (3) years from the date of submission and receipt of bids, a contract similar to the Project.

Bidders should have at least one (1) Meteorologist and one (1) Data Scientist for continuous consultation related to the service level and quality of environmental data that are used in the system.

Bidders should have demonstrated experience and capacity to manage internet-based devices in a highly urbanized city (HUC) in Metro Manila.

Due to the nature of the system, technical support on the cloud-based application must be readily available for emergency repair and maintenance works.

V. APPROVED BUDGET FOR THE CONTRACT

The approved budget for the contract is **eleven million one hundred thousand pesos (P11,100,000)**.

ITEM	BUDGET (PHP)
One (1) Year Maintenance, Warranty And Technical Support Of The Following Cloud-Based Applications Including Supply And Processing Of Environmental Datasets	11,100,000
One (1) Year Data Backup/Redundancy	
One (1) Year Meteorological And Data Science Support	

Orientation And Documentation	
TOTAL	11,100,000

VI. PROJECT DURATION

The delivery period of the Project shall be within thirty (30) calendar days upon issuance of Notice to Proceed. License, warranty, and technical support are valid for one (1) year upon delivery of the Project.

VII. BASIS OF PAYMENT

Below are the deliverables that will be used as the basis for full payment.

Item	Deliverables	Payment Percentage
Delivery of Maintenance, Warranty And Technical Support Of The Following Cloud-Based Applications Including Supply And Processing Of Environmental Datasets	Project Acceptance Document & License Certificate	15%
Delivery of Data Backup/Redundancy System	Project Acceptance Document & License Certificate	40%
Delivery of Meteorological And Data Science Support	Project Acceptance Document & License Certificate	35%
Orientation And Documentation	Project Documentation and Training Certificate	10%

VIII. PENALTIES FOR BREACH OF CONTRACT

Incomplete and delayed delivery will result in penalties based on standard Government implementing rules and regulations.

Likewise, failure to carry out emergency repair or maintenance works on any part of the system upon the documented and written request of the end-user shall result in penalties based on the standard government implementing rules and regulations or may serve as grounds for incomplete delivery of services.

IX. CANCELLATION FOR OR TERMINATION OF CONTRACT

Incomplete and delayed delivery and non-performance of services will result in penalties and termination of contract based on standard Government implementing rules and regulations.

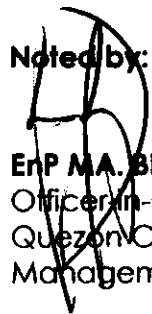
Prepared and recommended by:



ERWIN CARLOS N. VALDEZ

Deputy for Operations
Quezon City Disaster Risk Reduction
Management Office (QCDRRMO)

Noted by:



EnP MA. BIANCA D. PEREZ

Officer-in-Charge
Quezon City Disaster Risk Reduction
Management Office (QCDRRMO)