

TERMS OF REFERENCE (TOR)

Project Title

Supply, Delivery, Installation, Integration, Training, Testing and Commissioning of an Integrated Disaster Intelligence, Unified Command, Hazard Monitoring, and Risk Reduction and Management Platform for the All-Hazards Early Warning and Emergency Alert System of the City Government of Tabaco

I. Procuring Entity

City Government of Tabaco through the City Disaster Risk Reduction and Management Office (CDRRMO)

II. Background and Rationale

The City Government of Tabaco is continuously strengthening its disaster preparedness, response, recovery, and resilience capabilities in view of its exposure to multiple hazards, including volcanic eruptions, ashfall, lahar flows, severe weather disturbances, flooding, storm surges, landslides, earthquakes, and other emergencies.

At present, operational information is generated from various sources such as weather advisories, volcanic bulletins, barangay reports, evacuation center updates, field assessments, emergency response activities, and other government and public safety information systems. The use of separate and disconnected monitoring tools limits the City's ability to maintain a common operational picture and may affect timely decision-making during emergencies.

To address these challenges, the City Government of Tabaco intends to procure an Integrated Disaster Intelligence, Unified Command, Hazard Monitoring, and Risk Reduction and Management Platform that will function as the City's digital command center and all-hazards early warning and emergency alert system. The platform shall provide a centralized operational environment for situational awareness, hazard monitoring, incident management, risk analysis, executive decision support, and public safety operations.

III. Project Objectives

The project aims to:

1. Establish a unified digital command and control platform for disaster risk reduction and management operations;
2. Enhance real-time situational awareness and operational coordination during emergencies;
3. Strengthen all-hazards monitoring, early warning, preparedness, response, and recovery operations;
4. Provide AI-assisted analytics, hazard intelligence, and decision-support capabilities;
5. Integrate relevant operational data sources into a common operating picture;
6. Improve incident reporting, resource monitoring, evacuation management, and damage assessment processes;

7. Support evidence-based decision-making by the Local Chief Executive, CDRRMO, Incident Management Teams, and partner agencies;
8. Ensure sustainability through training, knowledge transfer, maintenance, and technical support.

IV. Approved Budget for the Contract (ABC)

The Approved Budget for the Contract (ABC) shall be the amount approved by the City Government of Tabaco and reflected in the applicable Annual Procurement Plan (APP), PPMP, and Budget Appropriation.

V. Scope of Work

The winning bidder shall undertake the following:

A. Supply and Delivery

Provide all software licenses, subscriptions, cloud services, modules, system components, documentation, and related services necessary for the complete implementation of the project.

B. Installation and Configuration

1. Configure the platform based on the operational requirements of the CDRRMO.
2. Configure user roles and permissions.
3. Configure barangay, facility, evacuation center, and operational datasets.
4. Configure dashboards, map layers, reports, alerts, and command-center operational views.
5. Configure approved interoperability and integration requirements.

C. Integration Services

The platform shall support integration or interoperability with available and authorized data sources including but not limited to:

- Weather and climate monitoring sources;
- Volcanic monitoring and advisory sources;
- CCTV systems and field reporting mechanisms;
- Barangay reporting systems;
- Evacuation center monitoring data;
- Operational and incident reporting datasets;
- Other authorized government and public safety information sources.

D. Training and Capacity Building

The supplier shall provide:

1. Administrator Training;
2. Command Center Training;

3. Operator Training;
4. Scenario-Based Exercises;
5. System Administration Training;
6. Knowledge Transfer Sessions.

Training materials, manuals, and user guides shall be provided.

E. Testing and Commissioning

The supplier shall conduct:

1. Functional Testing;
2. User Acceptance Testing (UAT);
3. Security and Access Validation;
4. Integration Validation;
5. Performance Testing;
6. Final Commissioning.

VI. Minimum Technical Requirements

The platform shall comply with the Technical Specifications approved by the City Government of Tabaco and shall include, at a minimum:

A. Unified Command and Control Platform

- Web-based and cloud-hosted architecture;
- Role-Based Access Control (RBAC);
- Operational command dashboard;
- GIS-enabled situational awareness mapping;
- Incident monitoring capabilities;
- Executive decision-support views;
- Audit trail and activity logging.

B. All-Hazards Early Warning and Monitoring

- Weather monitoring;
- Volcanic hazard monitoring;
- Ashfall monitoring;
- Lahar and debris-flow monitoring support;
- Flood monitoring support;
- Risk visualization and hazard overlays;
- Preparedness and readiness indicators.

C. Artificial Intelligence Features

- AI-assisted analytics;
- AI-generated summaries;
- AI-assisted risk assessment;
- AI-assisted prioritization of incidents;
- Predictive and trend analysis capabilities;
- Decision-support recommendations.

D. Recovery and Post-Incident Monitoring

- Damage assessment dashboards;
- Resource and aid monitoring;
- Recovery monitoring;
- Operational reporting and analytics.

VII. Supplier Qualification Requirements

In addition to the legal, technical, and financial eligibility requirements under RA No. 12009 and its IRR, the bidder shall demonstrate experience in disaster management, emergency operations, public safety systems, command center solutions, government technology platforms, artificial intelligence applications, and related fields.

The bidder shall submit documentary evidence of qualifications, certifications, completed projects, key personnel credentials, and organizational capability relevant to the project.

VIII. Project Duration

The project shall be completed within Ninety (90) Calendar Days from receipt of the Notice to Proceed (NTP).

The bidder shall submit a detailed implementation schedule covering:

- Project Kick-Off;
- Requirements Validation;
- Configuration;
- Integration;
- Training;
- Testing;
- User Acceptance Testing;
- Go-Live;
- Final Acceptance.

IX. Deliverables

The supplier shall deliver the following:

1. Fully operational production platform;
2. Configured command center dashboards;
3. Hazard monitoring modules;
4. GIS and situational awareness layers;
5. Early warning and emergency alert functionalities;
6. AI-assisted analytics and reporting capabilities;
7. Training completion reports;
8. User manuals and administrative guides;
9. Source documentation and configuration documents;
10. Final project completion report;
11. One (1) year cloud hosting subscription;
12. One (1) year technical support and maintenance services.

X. Acceptance Criteria

The project shall be accepted upon:

1. Successful completion of installation and configuration;
2. Completion of testing and validation activities;
3. Successful User Acceptance Testing (UAT);
4. Delivery of all required documentation;
5. Completion of training requirements;
6. Issuance of Certificate of Acceptance by the City Government of Tabaco.

XI. Warranty, Maintenance and Support

The supplier shall provide:

- One (1) year cloud hosting;
- One (1) year technical support;
- Corrective maintenance;
- Software updates;
- Security patches;
- Remote helpdesk support;
- Escalation procedures for critical incidents.

XII. Data Privacy and Cybersecurity

The supplier shall comply with:

- Republic Act No. 10173 (Data Privacy Act of 2012);
- Republic Act No. 8792 (E-Commerce Act);
- Republic Act No. 10175 (Cybercrime Prevention Act);
- National Privacy Commission issuances;
- DICT cybersecurity advisories;
- Other applicable laws and regulations.

All information collected, processed, stored, and transmitted through the platform shall remain the property of the City Government of Tabaco.

XIII. Applicable Procurement Laws

This procurement shall be conducted in accordance with:

- Republic Act No. 12009 (New Government Procurement Act);
- Implementing Rules and Regulations (IRR) of RA No. 12009;
- Relevant Government Procurement Policy Board (GPPB) issuances;
- Applicable COA, DBM, DILG, DICT, and NPC regulations.

Prepared by:

CITY DISASTER RISK REDUCTION AND MANAGEMENT OFFICE
City Government of Tabaco