FEDERAL EMERGENCY MANAGEMENT AGENCY

Risk Mapping, Assessment, and Planning (RiskMAP)

DRAFT STATEMENT OF OBJECTIVES
(Customer and Data Services)

I.   DESCRIPTION AND PURPOSE:

As part of the Department of Homeland Security (DHS), the Federal Emergency Management Agency (FEMA) has operated the Flood Map Modernization (Map Mod) program since 2004. This program began the work of conducting a large-scale overhaul of the nation's flood hazard maps. Work accomplished under the program has included data collection and analysis, map production, product delivery, and effective program management. Mapping services in support of the National Flood Insurance Program must be continued and updated Flood maps must be maintained as the program evolves to meet the objectives outlined in this document. This initiative will continue to produce digital flood hazard data, provide access to flood hazard data and maps via the Internet, and implement a nationwide state-of-the-art infrastructure that enables all-hazard mapping. The infrastructure developed during Map Mod will continue to evolve and be used to deliver flood hazard data in support of the National Flood Insurance Program (NFIP) and will also support the distribution of geospatial data of all hazards, including those that are man made. Since the political and technological environments are continuing to evolve, this initiative will require the continuous review of existing systems and potential development of new standards or approaches in meeting the objectives outlined below.

The purpose of this Statement of Objectives (SOO) is to obtain contract support which will replace the single National Service Provider Contract which expires in March of 2009; replace expired Regional Indefinite Delivery Indefinite Quantity contracts; and supplement the remaining Regional Indefinite Delivery Indefinite Quantity contracts.

This SOO will address only the Customer and Data Services acquisition. The Program Management and Production and Technical Services contracts will be addressed in separate documents.

II.   BACKGROUND:

FEMA's flood maps are one of the essential tools for flood hazard mitigation in the United States. These maps are used an estimated 20 million times annually in the private and public sectors, in the following ways:

- Lending institutions and insurance companies use them to determine who needs flood insurance and to determine flood insurance rates.
- Community planning officials, land developers, and engineers use them for designing and siting new buildings and infrastructure to be safe from flooding.
- States and communities use them for hazard mitigation planning and emergency management.

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- Federal agencies use them when implementing Executive Order 11988, Floodplain Management.

The first phase of Map Mod will provide at its completion:

- A solid performance based project and program management infrastructure focused on results;
- A premier flood data collection and dissemination platform;
- Strong effective partnerships with state, local, and other federal governments;
- Digital flood hazard data and maps for 92% of the Nation's population;
- New, updated, or validated flood hazard data for 30% of the mapped stream miles; and
- Credible floodplain boundaries for 75% of mapped stream and coastal miles.

FEMA's Mitigation Directorate is undergoing philosophical and tactical shifts in how it delivers information necessary for flood hazard reduction. The concepts presented here form an appreciably improved, integrated approach to identifying flood hazards that are then woven into watershed-based risk assessments and State and local Hazard Mitigation Plans. FEMA published a Concept Paper in June 2007 to lay out a vision for this integrated approach. The Concept Paper can be found at http://www.fema.gov/plan/ffmm.

III. FEMA STRATEGIC GOALS:

"A Nation Prepared" is FEMA's vision and its mission is to lead America to prepare for, prevent, respond to, and recover from disasters. Risk MAP clearly helps ensure that both the Nation, as well as individual communities, are prepared for future floods and other hazard events. With accurate, up to date flood hazard data, states and communities have the tools to reduce future flood losses. FEMA has identified 6 strategic goals for the next 5 years as follows:

- Reduce loss of life and property
- Minimize suffering and disruption caused by disasters.
- Prepare the Nation to address the consequences of terrorism
- Serve as the Nation's portal for emergency management information and expertise
- Create a motivating and challenging work environment for employees
- Make FEMA a world class enterprise

IV. MITIGATION DIRECTORATE MISSION:

The mission of the Mitigation Directorate is to create safer communities by reducing loss of life and property; enable individuals to recover more rapidly from floods and other disasters; and lessen the financial impact of disasters on the Nation. This is accomplished through three primary objectives:

- *Analyze Risk* - Determining the impact of natural hazards that lead to effective strategies for reducing risk.

FAR 3.104 & 2.101

- *Reduce Risk* - Reducing or eliminating long-term risk from hazards on the existing built environment and future construction.
- *Insure for Flood Risk* - Reducing the impact of floods on the Nation by providing affordable flood insurance.

V. PROGRAM DESCRIPTION

In order to leverage the successes of Map Modernization and further enhance the usability and value of flood hazard mapping, FEMA has developed the RiskMAP program. RiskMAP combines flood hazard mapping, risk assessment tools and Hazard Mitigation Planning into one seamless program. The intent of this integrated program is to encourage beneficial partnerships and innovative uses of flood hazard and risk assessment data in order to maximize flood loss reduction.

The vision of RiskMAP includes several components. These include:

(1) Identifying additional flood hazard data needs and establishing a life-cycle approach to mapping updates, including areas along the Nation's coast and those protected by levees;

(2) Conducting informative watershed based risk assessments for all watersheds in the Nation opening the door for more effective risk communication, flood mitigation planning, and flood risk reduction performance tracking;

(3) Ensuring Hazard Mitigation Plans are assessed and updated every five years locally and every three years at the state level; and

(4) Keeping the Nation's flood maps credible, enhancing their quality, and maintaining ease of data availability.

As the current Map Modernization support contracts throughout the country are expiring, FEMA assessed the need for the new replacement, follow-on contractual support. After extensive consideration and analysis as well as significant input from industry, FEMA crafted an acquisition strategy to optimize stakeholder acceptance; deliver results using an enabling vision; ensure needed flexibility and adaptability exists; facilitate smooth and seamless transition; and provide innovation with problem solving capabilities to meet the challenges facing the program. This new strategy involves a restructuring of the business model where a National Service Provider currently provides program management, customer service and many other services required to run the overall effort. The restructuring will include separating the program management and customer service segments of executing the program from the actual production of digital maps. The new approach includes establishing separate contracts to provide three groupings of services:

- Program Management (PM)
- Customer and Data Services (CDS)
- Production and Technical Services (PTS)

FAR 3.104 & 2.101

VI. UNIVERSAL OBJECTIVES FOR PROGRAM MANAGEMENT; CUSTOMER AND DATA SERVICES; AND PRODUCTION AND TECHNICAL SERVICES

While each area will have separate contract(s), the success or failure of RiskMAP will hinge on the interaction and cooperation of all contractors working as a team to ensure the smooth, seamless flow of information to all stakeholders and partners, both internal and external, and a comprehensive, coordinated approach to provide information AND services to customers at all levels. A failure by a single contractor at any level may lead to program failure. It is the responsibility of all contractors to participate as team members with all other contractors.

To this end, FEMA has established Universal Objectives for all RiskMAP contractors. Additionally, there are Overarching Assumptions and Constraints that apply to all contractors.

Universal Objectives:

> **Universal Objective A**: Provide a high level of cooperation across the RiskMAP program contractors, ensuring that the RiskMAP program mission overrides the individual contractors' preferences.
>
> **Universal Objective B:** Implement program cost, schedule, scope, and quality management practices that enable reliable and efficient operations and forward-thinking innovation throughout the RiskMAP program
> - Ensure that internal contractor systems for earned value management and performance management integrate with the RiskMAP program systems
> - Monitor, evaluate, and mitigate risks within the CDS portion of RiskMAP
> - Comply with the RiskMAP change control process
> - Support the RiskMAP Program Management contractor in achieving the Program's goals

Overarching Assumptions and Constraints:

- All activities align with DHS/FEMA strategic goals and constraints

- Outreach activities are coordinated, integrated, and consistent with RiskMAP messaging throughout the program including appropriate advisory focus groups

- Solutions leverage existing FEMA investments and resources, are cost effective, and demonstrate a sound return on investment (ROI)

- The solution meeting these goals and objectives must address important federal mandates and business drivers, including, but not limited to: the Government Paperwork Elimination Act; the Government Information Security Reform Act; the Clinger-Cohen Act; the Government Performance and Results Act; the Federal Records Act; the Computer Security Act; the Freedom of Information Act; the

FAR 3.104 & 2.101

Disabilities Act; Section 508 of the Rehabilitation Act; the Disaster Mitigation Act of 2000; the National Flood Insurance Reform Act of 1994;the Stafford Act; the Flood Disaster Protection Act of 1973, the Housing and Urban Development Act of 1969; and other laws and regulations specific to FEMA.

- The solution must comply with all statutes and demonstrate working knowledge of applicable regulations, policies, guidelines, and specifications that affect the NFIP, the mission of the Department of Homeland Security, and related multi-hazard programs including risk assessment in a pre- and post- disaster environment.

- The solution must demonstrate the flexibility to accommodate a changing environment that includes a shift to all hazards and homeland security. In addition, the solution may recommend changes to improve efficiency and effectiveness of program functions and management.

- Data security and privacy issues are a major focus of the federal government's information technology efforts. All program activities must be compliant with the Government Information Security Reform Act, OMB policies, and FEMA and the Department of Homeland Security requirements.

- Information technology (IT) systems must be coordinated with and comply with FEMA and Department of Homeland Security enterprise architecture requirements.

- The solution must include a transition plan describing how continuity of services will be maintained (e.g., production of flood hazard maps and related products, customer service and community outreach, program oversight, etc.)

VII.   CUSTOMER AND DATA SERVICES OBJECTIVES.

OBJECTIVE 1

Provide Direct, Knowledgeable, and Friendly Customer Service: Leverage existing systems and, where appropriate, use proven new media to provide technical assistance and infrastructure for disseminating RiskMAP outreach, training, and support. In coordination with content providers, identify the most effective medium for content and deliver through that medium**.**

- Provide technical support to prepare, deliver and maintain content from a variety of sources for posting to FEMA.gov or other relevant websites.
- Deliver effective training based on content provided by system or application developer.
- Provide a Technical Assistance Call Center through a single point of entry to proficiently respond to stakeholder inquiries.
- Provide a means for effective coordination with stakeholders across RiskMAP initiatives and contractors.

FAR 3.104 & 2.101

OBJECTIVE 2

Develop an IT Strategy and Solution Requirements: Develop an implementation strategy for a reliable, efficient, and interoperable IT architecture to address RiskMAP.

- Leverage existing investments in systems, programs, and data while incorporating new technologies.
- Achieve smooth transition from existing systems
- Develop IT Systems as needed: Develop, build and host interoperable IT systems that support Program Management, Production and Technical Services requirements, Customer Service, and other programmatic needs.
  - o Develop IT systems to integrate and support Program Management requirements
  - o Develop IT systems to facilitate RiskMAP product development to support Production and Technical Services requirements
  - o Provide a solution to analyze, manipulate, and integrate the management, distribution and sequencing of RiskMAP products and programs including a *RiskMAP Data Management System.*

OBJECTIVE 3

Implement IT Strategy and Solution: Implement the strategy by providing a comprehensive IT solution to support RiskMAP business requirements including program coordination, planning and collaboration.

- Leverage effective mapping partnerships to assist in creating delivery solutions for RiskMAP products, services, and messages.
- Implement a *RiskMAP Data Management System:* Use the latest proven technology to develop and maintain a system that ensures user-friendly risk analysis information is available, accessible, and updatable to effectively support the RiskMAP life-cycle.
- Support expansion/enhancement of FEMA's Digital Vision to integrate RiskMAP programs and products and reduce the dependency on paper products.
- Distribute National Flood Hazard Layer (NFHL) products and MapViewer Data
- Maintain metadata catalogs.
- Include flexibility to incorporate natural hazards-related information and capture flood-related hazards produced through FEMA disaster programs.
- Provide data and services that support the Emergency Management Cycle including the capture and preservation of perishable post disaster data that support the development of enhanced RiskMAP products.
- Acquire, update and disseminate HAZUS national data sets.
- Disseminate RiskMAP tools and products through a web-based portal accessible from a single point of entry.
- Maintain a physical and virtual library of flood map supporting documentation and make available a standard suite of data products to fulfill external data requests.
- Leverage the existing Map Service Center data distribution.

FAR 3.104 & 2.101

- Provide data and systems that quantify, measure program benefits, and assess losses avoided.

VIII. CUSTOMER AND DATA SERVICES ASSUMPTIONS AND CONSTRAINTS:

- Contractors must comply with all DHS information technology requirements including but not limited to:
    - Data center policy (use the data center or develop a business case for another option)
    - Enterprise Architecture
    - IT security
    - EA target for geospatial information infrastructure requirements
    - 508 compliance
- The strategy and solution should address:
    - User and business requirements including all aspects of regional operations requirements.
    - Building upon the progress made during Map Modernization and other Mitigation programs.
    - An integrated approach to E-commerce and fee collection.
    - Change management
    - Continuous improvement of systems
    - IT Architecture for RiskMAP
    - Process for making systems easy to use, (e.g. single point of entry, propagating data to avoid multiple manual entries, usability, user-centric design).
- Existing FEMA systems to be leveraged may include but are not limited to: Map Service Center call center; FEMA Map Assitance Center call center; mitigation plan tracking systems; Coordinated Needs Management Strategy; DVT; NEMIS; Mapping Information Platform; Community Information System; NextGen; Floodsmart; Mid-term Levee Inventory; FEMA Levee Information System; HAZUS tools and data; engineering studies library; e-commerce, fee collection, and data and paper map delivery solutions of the MSC.
- Business requirements should include E-Learning, performance tracking (e.g. EVMS), web based conferencing, managing flood mapping-needs information, and website hosting.
- All communities must be able to access RiskMAP products and intermediate data deliverables.
- Solutions must be able to accommodate new hazards as needs arise.
- Approach must include utilization of IT best practices for collecting and documenting user and stakeholder requirements in a collaborative and iterative manner and can support evolving system needs.
- All solutions must ensure continuity of operations so that there is minimal impact on existing programs.
- Contractors must use established IT life cycle development methodologies which includes third party validation and participation from users.

FAR 3.104 & 2.101

IX.   DEFINITIONS:

Change Management: (Two perspectives apply). From the standpoint of systems engineering, change management is instituting a change control process and release management plan for IT systems that efficiently meets stakeholder needs and business requirements. From the standpoint of meeting desired future conditions, change management means providing support and guidance to reach improved stakeholder involvement and communication, improved alignment of technology with business processes and improved understanding and implementation of policies.

Continuous Improvement is adaptation of systems and processes based on consistent solicitation of feedback and other data, and evaluation of changes to ensure they met needs.

Life cycle development methodology is the model of processes that will be used to create or refine a system and drive improvement of the system.

"Map Service Center data distribution" includes data storage, archival repository, distribution, and inventory control of paper and digital products, with focus on transition to all-digital.

Partner: An entity that leverages resources with FEMA, and potentially other entities, to achieve a shared vision of hazard and risk information communication. Partners typically provide access to data that they maintain, but may also provide other types of support.

RiskMAP products: DFIRMs, LOMCs, Loss Estimation Tools such as HAZUS, and Hazard Mitigation Plans. All RiskMAP products will be either produced by RiskMAP contractors or partners. All Hazard Mitigation Plans will be produced solely by partners at the local and state level.

RiskMAP programs: include Flood Hazard Mapping, Risk Assessment and Hazard Mitigation Planning.

Stakeholder: Has vested interest in RiskMAP programs but may not be contributing data. Stakeholders include partners and users, in addition to other entities. Current stakeholders include general public, state and local officials, lenders, insurance agents, realtors, homebuilders, environmental groups, engineers, surveyors, planners, flood insurance policy holders, other Federal Agencies, Congress, Office of Management and Budget and others.

User: Any technical or non-technical customers accessing, utilizing, or manipulating RiskMAP data, products, or systems.

FAR 3.104 & 2.101

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