



DM Framework IOC Requirements Review Overview and Discussion

March 4, 2009



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Where to Go

- The Requirements Review Package consists of the following four (04) documents:
 - Overview
 - Concept of Operations (CONOPS)
 - DM Framework Full Requirements
 - DM-OPEN Full Requirements
- All of these documents can be accessed and downloaded from
<http://www.disasterhelp.gov/disastermanagement/about/about-ioc.shtm#1>



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Purpose

- The Concept of Operations calls for DMIS to be replaced by a new set of capabilities known as the DM-Framework.
- Original DMIS requirements and new requirements associated with the DM-Framework are being thoroughly evaluated to ensure that core functionality from DMIS is not lost when new capabilities are implemented.
- These requirements will be used to evaluate potential COTS, GOTS and open source components of the DM-Framework as they are acquired and implemented.
- Initial Operating Capability (IOC) requirements identified in the DM Framework Requirements document form a base line expected to be operational in Fall 2009.
- Additional requirements identified will be evaluated for future functionality development, scheduled after Fall 2009 delivery of the IOC.



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Overview

- The DM-Framework will be a container for user capability designed to be a preferred point of entry for access to emergency management software application functionality.
- The DM-Framework, along with DM-OPEN, will provide a federated platform that will allow for the loose coupling of different systems.
- This will also allow organizations to leverage existing solutions side-by-side and add additional products that can supplement and/or compliment their current systems.
- The base framework functionality will deliver a set of common services with enterprise reach.



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Next Steps

- Once the DMIS Assessment Project is complete we will deliver our recommendation and business requirements to the development contractor who will be implementing the new toolset.
- It is important to point out that we may not recommend implementation of all requirements that are gathered throughout the assessment process. The constraints that we define along the way will place limits on our recommendations.
- In order for the assessment to be successful we need stakeholders, like each of you, to be involved in the process.



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DM Framework Components

- DM-Framework Initial Operating Capability (IOC) will include:
 - Incident Planning and Response
 - Reference Material for Operational Effectiveness
 - Resource Request and Tracking
 - COG and Operator Administration
 - Common Alerting Protocol (CAP) and Non-Weather Emergency Messages (NWEM) (National Weather Service (NWS) HazCollect) Alerts
 - National Map for Incidents and Alerts
 - Create and View EDXL-DE wrapped content
 - Weather Forecast Data, Doppler Radar, and Alerts
 - Secure Instant Messaging
 - Operator Interface Functionality
 - Journal Recording
 - Core System and Security Functionality
 - Shared Interactive Maps integrated with Incident Planning and Response



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4.1 Provide Incident Planning and Response Capabilities

Incident Planning and Response is a fundamental capability of the DM-Framework. This capability covers the ability for emergency management personnel to plan for and respond to emergencies of all kinds. Requirements identified for this capability are usually found in comprehensive emergency management applications, but some aspects may also be found in smaller, more targeted applications.



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4.2 Provide Shared Interactive Maps

Interactive mapping is a fundamental need for shared situation reporting and planning. This capability allows operators at multiple locations to share maps and map markup in real time. Map markup includes both symbology and information associated with map symbols. The shared interactive maps will include the use of OGC Standard Web Map Services.



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4.3 Provide Resource Request and Tracking

This capability provides a DM-Framework operator with the ability to request emergency resources (equipment, supplies, people, and teams in any combination) and reply to those requests. It also provides the ability to report and request status of deployed resources. It will use data standards from the Emergency Data Exchange Language (EDXL) Resource Messaging (RM) Specification for exchanging resource information between exchange partners.



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4.4 Provide CAP and NWEM Alerts

The DM-Framework will provide the DM-Framework operator with the ability to create and send CAP 1.1 alerts to others on the DM-Network and, through connecting networks, across the nation. One specific instance of this inter-network capability is the ability to create a specially formulated Non-weather Emergency Message (NWEM) formatted CAP message to the National Weather Service for transmission to the public over NOAA radio.



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4.5 Provide National Map for Incidents and Alerts

The National Map is a component of the "enterprise-wide reach" concept for the DM-Framework. Incidents and alerts determined to be of significance can be posted for inclusion on a national map that is viewable by all authorized DM-Framework operators.



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4.6 Provide Journal Recording

Journal Recording allows time-stamped record keeping of events that happen during and after an incident. The DM-Framework will include a service for accomplishing journaling activity.



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4.7 Provide Secure Instant Messaging

An internal instant messaging capability allows secure "chat" between DM-Framework operators without the risk of using public capabilities.



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4.8 Provide Weather Forecast Data, Doppler Radar, and Alerts

A weather component will provide access to standardized weather information from within the DM-Framework for all DM-Framework operators.



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4.9 Create and View EDXL-DE Wrapped Content

The EDXL Distribution Element (EDXL-DE) provides a standard wrapping construct for message content of all kinds. The DM-Framework will provide a user-interface that allows its members to create the wrapper, enclose chosen content, and post that content to DM-OPEN for retrieval by other authorized DM-Framework operators and authorized operators of DM-OPEN. On the return side, the DM-Framework operators will have the capability to retrieve and view EDXL-DE messages posted to them through DM-OPEN.



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4.10 Provide Operator Interface Functionality

Certain Operator Interface functionality should be ubiquitous across all services of the DM-Framework. Requirements for this operator functionality are gathered under this cross-component service.



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4.11 Provide Core DM-Framework System Functionality

Certain core capabilities should be ubiquitous across all services of the DM-Framework. Requirements for these operator capabilities are gathered under this cross-component service.



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4.12 Provide COG and Operator Administration

COG (Collaborative Operations Group) and Operator administration concerns the management of DM COGs (the basic unit for grouping DM operators under the management of an organizational group). This functionality includes the ability to add and deactivate operators, update operator data, and manage organizational data relative to the COG.



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4.13 Provide Security Functionality

Certain core security functionality should be ubiquitous across all services of the DM-Framework. Requirements for security are gathered under this cross-component service in accordance with the following references: The Federal Information Security Management Act (FISMA) of 2002, DHS 4300A Sensitive Systems Policy, National Institute of Standards and Technology's 800-14, 800-37, and 800-53 and DHS MD 11042 Safeguarding Sensitive But Unclassified (For Official Use Only) Information.



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4.14 Provide Reference Material for Operational Effectiveness

Certain core security functionality should be ubiquitous across all services of the DM-Framework. Requirements for security are gathered under this cross-component service in accordance with the following references: The Federal Information Security Management Act (FISMA) of 2002, DHS 4300A Sensitive Systems Policy, National Institute of Standards and Technology's 800-14, 800-37, and 800-53 and DHS MD 11042 Safeguarding Sensitive But Unclassified (For Official Use Only) Information.



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Feedback Instructions

- To provide some structure and guidance for providing feedback, we have developed a list of questions to facilitate the requirements review process.
- The questions are broken down into three categories:
 - Category A deals with the identified components
 - Category B deals with specific requirements related to additional components you may identify
 - Category C provides an opportunity to submit comments related to any relevant topic



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Feedback Instructions (Cont)

- As you review the documents and answer the questions, please provide the reasoning behind your answers.
- You are free to comment on any of the components and requirements, but it is not required that you address each and every component and requirement.
- Please focus on the items that are important to you and omit comments on topics that are immaterial to your interests.



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Feedback Instructions (Cont)

Questions List for Feedback Process

- **Category A** – requirements related to identified components
- Are there any requirements related to identified components that are missing?
- Are there any requirements identified for IOC that could be deferred to post IOC?
- Are there any identified requirements that need rewording for clarification? Please suggest the rewording for the requirement.



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Feedback Instructions (Cont)

- **Category B** – requirements related to additional components not previously identified
- Are there additional components that need to be added to either of the two systems?
- What requirements should be associated with new components identified in the previous question?
- **Category C** – General Comments.
- Are there any comments about anything that you have seen in these documents that you would like us to know about?



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Example Comment

For an Existing Requirement

4.1.6 Now reads “The DM-Framework shall provide Authorized Operators with the ability to enter and update Medical Facility Information.”

Comment could read:

4.1.6, IOC: True

Change to: The DM-Framework shall provide Authorized Operators with the ability to enter and update critical infrastructure and key resources information.

Rationale: Providing a uniform method of identifying critical facilities, infrastructure and key resources, regardless of type, will make the Operator Interface easier to use. It should also facilitate the import of existing local data and geo-locating. Finally, this approach should be consistent with the approach used by the DHS Critical Infrastructure Protection Program.



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Example Comment

For a New Requirement

4.12. Provide COG and Operator Administration

Comment could read:

4.12. NEW, IOC: True

The DM-Framework shall provide a database field to classify Operators by function.

Rationale: Classifying Operators by function, such as Emergency Support Function or ICS role, could allow more targeted distribution of Alerts, Resource Requests, Taskings, and other communications. This should also be considered for potential value lists for the EDXL Distribution Element implementation in DM-OPEN.



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