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ALL-HAZARDS EMERGENCY MESSAGE COLLECTION SYSTEM (HAZCOLLECT)

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All-Hazards Message Collection System (HazCollect)

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1. Introduction. This National Weather Service (NWS) Instruction (NWSI) describes the end-to-end process of the All-Hazards Emergency Message Collection System (HazCollect). HazCollect is a comprehensive national solution for the centralized collection and efficient distribution of Non-Weather Emergency Messages (NWEMs) that are created by official emergency management organizations and other government agencies across the nation, to the public (See section 2.1 and Appendix A for types of NWEM events.)

HazCollect adds the significant new capability that allows authenticated and authorized Emergency Management (EM) and other government officials to author and distribute NWEMs automatically over NWS dissemination systems in text form and over the NOAA Weather Radio All Hazards (NWR) in audio form. Previously, EM officials' access to NWS dissemination systems was through manual call-in authentication and transcription procedures at a local NWS Weather Forecast Office with NWS staff acting as intermediaries. The use of HazCollect by EM officials to create and "post" (send) NWEMs is voluntary. The NWS expects use of this enhanced service to increase after government organizations learn of and understand the benefits.

See Appendix C for references that provide more comprehensive and technical descriptions and procedures of aspects of the HazCollect processes than contained in this NWSI. Some references are repeated in their associated sections for further clarity.

1.1. Mission Connection. The NWS mission to protect life and property is carried out by timely delivery of warnings and other weather and non-weather related information under the "all-hazards" concept.

The dissemination of NWEMs is done under authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act and the Department of Homeland Security (DHS) National Response Framework that implements the Act. The Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) is assigned responsibility by the National Response Framework to "provide public dissemination of critical pre- and post-event information" on NOAA Weather Radio All Hazards (NWR) and other dissemination systems. The HazCollect process produces emergency messages as text products that the NWR system requires for conversion to radio broadcasts. These text products are also transmitted to all other

NWS dissemination systems and through media and commercial outlets for the widest public access.

The HazCollect system provides to the emergency management community an automated, secure and standardized tool to post hazard information on NWS's all-hazards communications systems.

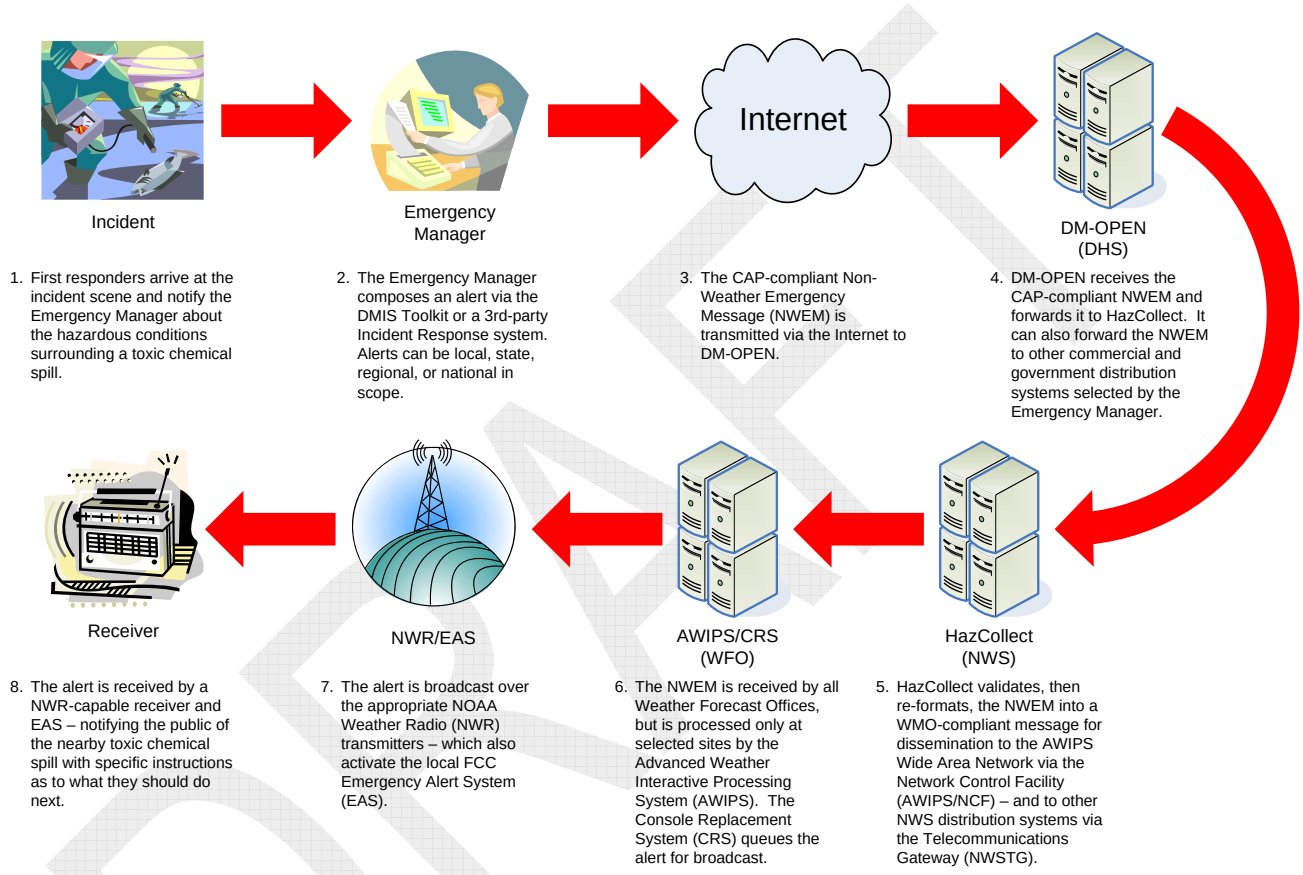

Figure 1. HazCollect Process

2. <u>Summary of HazCollect Processes.</u> The HazCollect process (see Figure 1) begins with identification of an incident by first responders that requires informing the public of a hazard or need to take specific action. First Responders notify authorized EM officials about the hazard. The authorized EM official composes an alert using a standards-based messaging system such as the Disaster Management Interoperability Services (DMIS) toolkit. The Common Alerting Protocol (CAP) compliant NWEM is transmitted or posted to the DHS Disaster Management Open Platform for Emergency Networks (DM-OPEN) - a centrally-located server for authentication of the originator and processing of the data. DM-OPEN transmits the information to the NWS's centrally-located HazCollect server(s) to be authorized and reformatted into NWS compatible NWEM products. The HazCollect server then delivers the NWEMs to NWS systems for dissemination, and thence through the Emergency Alert System (EAS), other media outlets,

and through the communications networks of private and commercial vendors, maximizing distribution of the emergency messages in real time. This automated and secure process takes less than two minutes from the time the operator posts the message until it is disseminated to the public, including the initiation of the NWR broadcast sequence.

EM officials create the originating message using a computer-human (user) interface, operating as a remote client at or near the actual incident. The HazCollect system is designed such that once the EM has finished composing the original message and has "sent" it from the remote user interface client, no further human intervention is required to get the message disseminated over the NOAA/NWS systems to the public. NWEMs include specific actions necessary to reduce the impact of the emergency such as evacuation orders or instructions for sheltering in place. (See Appendix A for the official list of authorized event categories and codes and Appendix E for some examples of NWEM products. NWEMs follow the rules set forth in NWSI 10-1701, Text Product Format and Codes, and NWSI 10-1702, Universal Geographic Code (UGC). NWEM definitions, specific formats and more examples are detailed in NWSI 10-518, Non-Weather Related Emergency Products Specification.)

2.1 Types of NWEM Events. Examples of non-weather/non-flooding events that may require the issuance of NWEMs by EM officials include earthquakes, volcanic activity, avalanches (snow avalanche and debris flow), chemical spills/releases, biohazards, fire incidents, nuclear incidents, AMBER Alerts/child abduction emergencies and terrorist activities -- all requiring quick alert and warning.

2.2 NWEM Nomenclature. Emergency information originated from EM (and other authorized) officials is in the form of data fields and is not technically a standardized public NWEM product until the HazCollect server reformats the incoming data (see section 5) into standard text and codes with appropriate product headers. For simplicity, however, this NWS Instruction refers to non-weather/non-flooding emergency information at any stage in the HazCollect process as NWEMs.

2.3 Systems Disseminating NWEM Products. NWS systems include such well known and well used methods as NOAA Weather Radio All Hazards, NOAA Weather Wire Service (NWWS), and Emergency Managers Weather Information Network (EMWIN), as well as myriad methods (government and commercial) including the EAS, Internet web pages, cell phones, pagers, facsimiles, etc. See section 5.5 for further information on NWS dissemination methods.

3. Department of Homeland Security Interoperability Infrastructure. Understanding the end-to-end dataflow and functions of HazCollect (detailed in section 5) requires a discussion of Federal government infrastructure provided by DHS's Federal Emergency Management Agency (FEMA), Disaster Management (DM) Program. The DM Program is an e-Government Initiative – a larger initiative aimed at greatly enhancing Disaster Management on an interagency and intergovernmental basis.

3.1 Disaster Management Open Platform for Emergency Networks. The Disaster Management (DM) Open Platform for Emergency Networks (DM-OPEN) provides

interoperability interfaces for sharing of alerts, situation reports, common operational picture snapshots and other emergency related information. These interfaces provide data structures and rules of operations designed to enable information sharing between diverse systems, both commercial and government. In general, these interfaces conform to open messaging standards—Emergency Data Exchange Language (EDXL)-- as defined through the Emergency Management Technical Committee sponsored by the Organization for the Advancement of Structured Information Standards (OASIS) standards organization and through the National Information Exchange Model (NIEM).

FEMA and NWS provide documentation to support the DM-OPEN interoperability interfaces and user interface development by third-party vendors. These other non-DMIS client user interfaces may be referred to as DM-OPEN or OPEN clients.

3.1.1 Common Alerting Protocol (CAP). CAP is the basic eXtensible Markup Language (XML) data exchange format enabling interoperability across data networks, computer-controlled public warning systems and incident management software applications. CAP is a simple, flexible, open, non-proprietary digital message format for collecting and distributing all types of "all-hazard" safety notifications and emergency alerts. CAP allows a consistent warning message to be disseminated simultaneously over many different warning systems, thus increasing warning effectiveness while simplifying the alerting task. The CAP format is fully compatible with existing formats, including the NWS Specific Area Message Encoding (SAME) used for NWR and the EAS.

Using CAP has the following advantages:

- Ensuring alert messages reach the right audience at the right time
- Reducing the workload, costs and operational complexities associated with using multiple warning systems and the need for multiple custom interfaces
- Enhancing technical reliability
- Ensuring consistency in the information transmitted over multiple delivery systems
- FEMA adoption of CAP for EAS
- FCC on-going rulemaking proceedings on CAP (www.fcc.gov/pshs/services/eas)
- Commercial Mobile Alerting System using CAP (www.fcc.gov/pshs/services/cmas.html)
- CAP is an internationally adopted standard

See details on CAP in OASIS Standard "Common Alerting Protocol (CAP) v1.1", October 2005 on the Internet site at http://www.oasis-open.org/committees/emergency/.

The HazCollect system is designed to receive a CAP-formatted message from the EM through the DM-OPEN server. Current NWS dissemination systems are not CAP-compliant; therefore an important function of the NWS HazCollect servers is to re-format the original CAP-formatted messages into WMO-formatted messages that are disseminated over NOAA/NWS systems.

3.2 Disaster Management Interoperability Services. Disaster Management Interoperability Services (DMIS) provides software tools (desktop client software) at no cost to responder organizations for increased disaster response effectiveness and enables responders to share

information seamlessly between organizations. The DMIS software is a configurable set of tools installed on any suitable PC that allows real-time information to be shared throughout the professional emergency management community during an incident in a secure, web-based environment. The DMIS Internet site is: www.disasterhelp.gov/disastermanagement/. See also sections 6.1.1.1, 7.2 and Appendix B of this NWSI for more information on DMIS registration and operations.)

3.3 Collaborative Operations Group (COG). Users of DM-OPEN and DMIS must establish membership in a Collaborative Operations Group (COG). COGs are essential to the functioning of DM-OPEN, DMIS and HazCollect. In fact, only an authenticated COG can post NWEMs to HazCollect for public dissemination via NWS systems.

A COG, simply put, is a virtual organization of users who agree to dynamically create and share information amongst themselves in real time. More specifically in terms of emergency management functions, a COG typically is a voluntary incident or consequence management organization consisting of emergency response officials who need to coordinate actions, communicate and exchange information in a collaborative environment. Each COG has a COG Administrator who manages all activities and assigns roles and privileges to the COG members (see section 6.1 for specific Administrator duties). With access rigorously controlled and secured via specific user roles and privileges, COG members can communicate internally with each other, and with other COGs, as stipulated in their operations plans. Most COGs are formed for these and other internal purposes apart from HazCollect.

Examples of organizations that may constitute a COG include an entire state or county EM office, divisions of an EM organization, local fire departments, Federal agencies, military units, a public or private consulting organization that participates in consequence management, or any combination of these (or similar entities) as necessary to maintain the desired level of collaboration. (More information about COGs within the context of authentication and authorization is found in section 6 and within the context of partner responsibilities in section 7.)

3.3.1 COG Registration. To become a COG, the group *must* formally register with DHS online at www.disasterhelp.gov/disastermanagement/. This COG registration is a precondition to registering with the NWS to become a HazCollect participant (see section 6.2.1 for HazCollect registration) that will enable interoperability between DMIS, DM-OPEN and HazCollect.

3.3.1.1 COGs Interoperable Through DMIS. After approval as a COG, the COG Administrator will receive the DMIS client software. Information and resources for DMIS training are online at www.disasterhelp.gov/disastermanagement/.

3.3.1.2 COGs Interoperable Through DM-OPEN. The DM-OPEN Application Programming Interface (API) permits third-party (government and commercial) incident management software systems to interoperate their systems with HazCollect. To register as a 3rd party system developer to build to the interoperability interface, register at www.disasterhelp.gov/disastermanagement/. Identify the registration in the text as requesting to be a "member of the Interoperability COG." This will get a commercial or government system

the appropriate passwords, etc. to build, test and demonstrate interoperability capabilities. Once a working system has been achieved, the user (government or responder agency that uses the software) registers as a responder COG, which gives that user (through their newly purchased commercial system or government-developed and installed system) interoperability access to all other DM-OPEN and DMIS responder COG's (including access to HazCollect) under normal DM-OPEN protocols.

3.4 Introduction to Authentication and Authorization Processes. The HazCollect system uses a two-part authentication and authorization process. The following explains the distinctions between the two. A comprehensive discussion is in section 6.

a. Authentication. This process, *a DHS and Emergency Management function*, ensures that a COG desiring interaction with DM-OPEN, DMIS or HazCollect is correctly identified through secure communications protocols. The DM-OPEN and DMIS trust model is based on the concept of establishing validated COGs. Once validated through formal registration procedures, each COG administers its own individual membership.

b. Authorization. This automated process, *a NWS function*, ensures that the NWEMs originated from an authenticated COG are correctly coded for their pre-assigned geographic areas, among other information, as noted in the COG's registration with the NWS to become a HazCollect participant. The NWS HazCollect server maintains this user profile.

4. Responsibilities of HazCollect Partner Organizations. The NWS has overall responsibility for the HazCollect program as described in section 4.3. While many of the partner organizations' responsibilities have been included in earlier sections, this section presents the HazCollect responsibilities and functions for each of the respective partner organizations, in the order of the end-to-end HazCollect process.

4.1 Local/State Emergency Management Groups. To interact with HazCollect, a pre-existing or newly appointed COG Administrator, typically an Emergency Manager and/or Information Technology (IT) Manager or designee, must formally register its group with DHS to become an official COG. An alternate/back-up co-administrator is allowed, even recommended. After DHS approval, the COG must also formally register with the NWS to be authorized to post NWEMs to HazCollect for its respective geographic areas of responsibility.

The approved COG administrator then has the following responsibilities: Advise decision makers; Recommend COG configuration; Install and configure DMIS (or equivalent) software; Establish operator accounts; Provide or arrange for training (see section 7); and, Assign roles and privileges, (i.e., select individuals within the COG to have the authority to variously create, read (review), edit or post incident and emergency information). The COG Administrator has all privileges. Posting, the most important privilege, allows an operator to "release" (transmit or send) information to the DM-OPEN server for further distribution.

4.2 Department of Homeland Security (DHS). DHS/FEMA Disaster Management (DM)

Program administers and manages the DM program including the DM-OPEN and DMIS infrastructure and the DM-OPEN central server. DHS administers the formal COG registration procedures. COG registration information is at www.disasterhelp.gov/disastermanagement/. DHS, at no charge, provides to approved COGs the DMIS training materials and software including the DMIS desktop client software that includes the tool to enter NWEM data. The DM-OPEN Application Programming Interface (API) permits third-party (government and commercial) incident management software systems to interoperate their systems with DMIS.

4.3 National Weather Service (NWS). The NWS has overall responsibility for the HazCollect program.

4.3.1 NWS Headquarters (NWSH).

4.3.1.1 Office of Climate, Water and Weather Services (OCWWS). OCWWS is responsible for outreach to the Emergency Management community, registration of HazCollect users, needs identification from stakeholders, requirements analysis, and coordination and creation of NWS training material.

4.3.1.2 HazCollect Review Group (HRG). The HRG is the official NWS team, under OCWWS management, that manages the HazCollect Participant Approval Process, a critical component of the NWS's authorization process for NWEM acceptance and dissemination. The HRG coordinates review processes leading to approval (or disapproval) of COG registrants to become official HazCollect participants. HazCollect participant approval guidelines maintained by the HRG have significant dependence on existing EAS plans coordinated by State Emergency Communications Committees or their equivalent for validation of warning authority (Emergency Manager, Law Enforcement, etc.) roles and responsibilities. (Also, see section 6.2.1 for more specific details on information COGs must provide in their registration with the NWS and that the HRG must review for authorization.)

An OCWWS staff member chairs the HRG, with cognizant HazCollect focal points drawn from the Office of Chief Information Officer (OCIO), the Office of Operational Systems (OOS), the Office of Science and Technology (OST) (all from NWSH), and each of the six NWS regional headquarters. Each HRG member will have an alternate, should the primary not be available. Communication among the HRG members and any other NWS staff, as needed, will be primarily via e-mail, web access or telephone.

Each HRG member will act as a "sponsor" for any COG registration information that falls within his/her area of responsibility, depending on whether the COG is local, state/regional or national in scope. Following are the duties of the sponsoring HRG members. Note the prominent role the Warning Coordination Meteorologists (WCM) play in the registrant validation process.

a. Local COG. The sponsoring regional HRG focal point e-mails notification of a registrant's profile to the appropriate WCM, whose area of responsibility includes this COG. The WCM will conduct the registrant validation by contacting the COG administrator, verifying the accuracy of the registrant's information with the COG staff and providing the sponsoring regional HRG focal point with his/her

findings and a recommendation for approval or reasons for disapproval.

b. State/Regional COG. The sponsoring regional HRG focal point e-mails notification of a registrant's profile to the appropriate WFO State Liaison Office (SLO) WCM if the COG is intra-state. (The WFO SLO is the one office per state designated to act on statewide issues.) If the COG involves multiple states the HRG focal point will address at the regional level and coordinate with adjacent region(s) if necessary. The SLO WCM (or regional HRG focal point for interstate COG) will conduct the registrant validation and provide the sponsoring regional HRG focal point with his/her findings and a recommendation for approval or reasons for disapproval.

c. National COG. The sponsoring NWSH HRG member(s) will conduct the registrant validation and provide their recommendation to the HRG.

The sponsoring HRG member e-mails his/her recommendation to all HRG members. The HRG assesses the recommendation of the sponsoring HRG member and obtains consensus for official approval (or disapproval). Upon approval, the HRG directs the HazCollect System Administrator (HSA) to include into the HazCollect server database appropriate registrant information that is subsequently used for NWEM authorization. These changes include the appropriate geographic location codes for NWEMs from the respective COGs' assigned geographic areas. The HRG either approves (or disapproves) the geographic location permissions requested by the COG or, after coordination, selects the geographic location permissions for the COGs' NWEMs. (COGs cannot select in DMIS software any geographic location for which they are not authorized.)

4.3.1.3 Office of Operational Systems (OOS). OOS is responsible for coordinating and issuing Advanced Weather Information Processing System (AWIPS) Mod notes and AWIPS software releases as required.

4.3.1.4 Office of Chief Information Officer (OCIO). OCIO provides maintenance and logistics support as system owner and HSA, technical contract administration, hardware and software configuration management, HazCollect server configuration file management, software and maintenance releases, and security functions (IT Security Officer).

4.3.1.5 Office of Science and Technology (OST). OST is responsible for any enhancements and required changes to the system. Detailed statements of work, schedule and identified funding will be used to task OST.

4.3.2 Regional Headquarters. The regional dissemination program manager, WCM program manager or other designee, at the discretion of the Regional Director, has overall management responsibility of the HazCollect program for their region, providing coordination and guidance with the field office WCMs and NWSH. A HazCollect focal point (and alternate) from each regional headquarters will be part of the HRG.

4.3.3 Field Offices.

4.3.3.1 Operational Field Office Procedures. Backup procedures for government and EM officials that are HazCollect participants will be maintained in the event of failure of HazCollect, DM-OPEN or other automated systems. Backup procedures will include fax, telephone or radio conversation, or other communication methods for authentication and message transcription by NWS staff.

4.3.3.2 Operational Field Office Staff Duties. As part of their overall "situational awareness" on shift, field office staff keeps apprised of all hydrometeorological and non-hydrometeorological information and events occurring within their area of responsibility. The staff may learn of non-hydrometeorological incidents from EM offices or other officials by any one of a number of methods including by telephone or the National Warning System (NAWAS), a voice network managed by DHS and accessible in all WFOs. In the HazCollect environment, the field office staff may frequently learn of an incident when a "red flag banner" with the title of the NWEM automatically opens up on their AWIPS workstations, indicating that the NWEM also has been disseminated via text product to the public. The staff would then display that NWEM text product.

An important part of the field office staff's duties is to expeditiously review any NWEM in the NWR browser Pending window on AWIPS. NWR broadcast will occur after a quick review for any needed technical and pronunciation corrections and adjustments. This includes the correct pronunciation by the NWR Voice Improvement Processor automated voice of names of people, places and technical aspects of the incident. If the pronunciation and/or other aspects of the automated broadcast are not accurate or suitable, the staff should manually record the NWEM for broadcast on NWR, as necessary.

Another aspect of NWR that needs monitoring is the proper insertion of the NWEM in the appropriate broadcast product suite and correct replacement by future messages for the same event. For example, the most urgent NWEMs requiring immediate action, such as toxic spills, nuclear incidents, etc., all under the NWEM "warning" (W) category, should be included in the NWR "Exclusive" product suite. Somewhat less urgent NWEMs, such as for AMBER Alerts or other NWEMs under the category "emergency" (E) should be included in the NWR "High" product suite. For this and all other aspects of NWR, see NWSI 10-1710, NOAA Weather Radio Dissemination, and appropriate AWIPS and NWR Console Replacement System (CRS) Mod Note(s) and Maintenance Note(s).

4.3.3.3 Warning Coordination Meteorologist (WCM) Duties. In addition to the standard operational duties, as required in section 4.3.3.1, the WCM (or designee as determined by the office's Meteorologist in Charge) from each field office has a primary role in the outreach, awareness, coordination and registrant validation efforts for HazCollect, in coordination with the regional HazCollect focal point(s). The WCM has the following duties:

a. The WCM receives the COG registrant's information to become a HazCollect participant from the sponsoring HRG regional focal point and then contacts the COG administrator in his/her area of responsibility to begin the registrant

validation process (see next item), which may include helping the COG with the registration process.

b. For city, county and state level COGs in their respective area of responsibility, the WCM will verify HazCollect registrant profile information, including its correct geographic areas and recommend to the HRG regional focal point 1) whether the COG is suitable for HazCollect participation and 2) the appropriate UGCs (Universal Geographic Codes) for the COG's assigned geographic areas for NWEM issuance.

c. The WCM also may provide information to prospective COGs and COG members about DM-OPEN, DMIS, HazCollect and recommended NWEM writing style.

d. The WCM also may alert the HRG of COG registrant information changes for approved COGs if the COG Administrator (or designee) does not take similar action.

5. HazCollect Infrastructure and End-to-End Dataflow Process.

5.1 NWEM Origination. NWEMs (text and codes in standard data fields) for HazCollect dissemination are originated from HazCollect authorized COGs within the government and emergency management community (see lower-left corner of Figure 2). The operator prepares a message on a PC with Internet access and appropriate software and, using his or her own words and specific local knowledge of the area and the hazardous incident, enters the information into standardized data entry fields* and then posts it for further dissemination (see section 5.2).

*Note: Of the standard data entry fields, only three fields are free text: "Headline" "Description" and "Instruction". The Description, the key component of the message, is a narrative statement that describes the "what, where, when" and the Instruction is the "how the public should respond and how to get additional information" part of the text message. (See Appendix E for examples and explanatory notes.)

Appendix B, "Procedures for NWEM Creation from DMIS Software," provides a "workflow" of typical steps the operator will take to create an NWEM on the PC from the DMI-Services client toolkit. See the DHS web site for the DMIS toolkit at www.disasterhelp.gov/disastermanagement/, which provides detailed information on all aspects of DMIS use and NWEM creation. For NWEM creation using other 3rd party DM-OPEN-standard commercial or government developed software/systems, refer to system specific documentation and training.

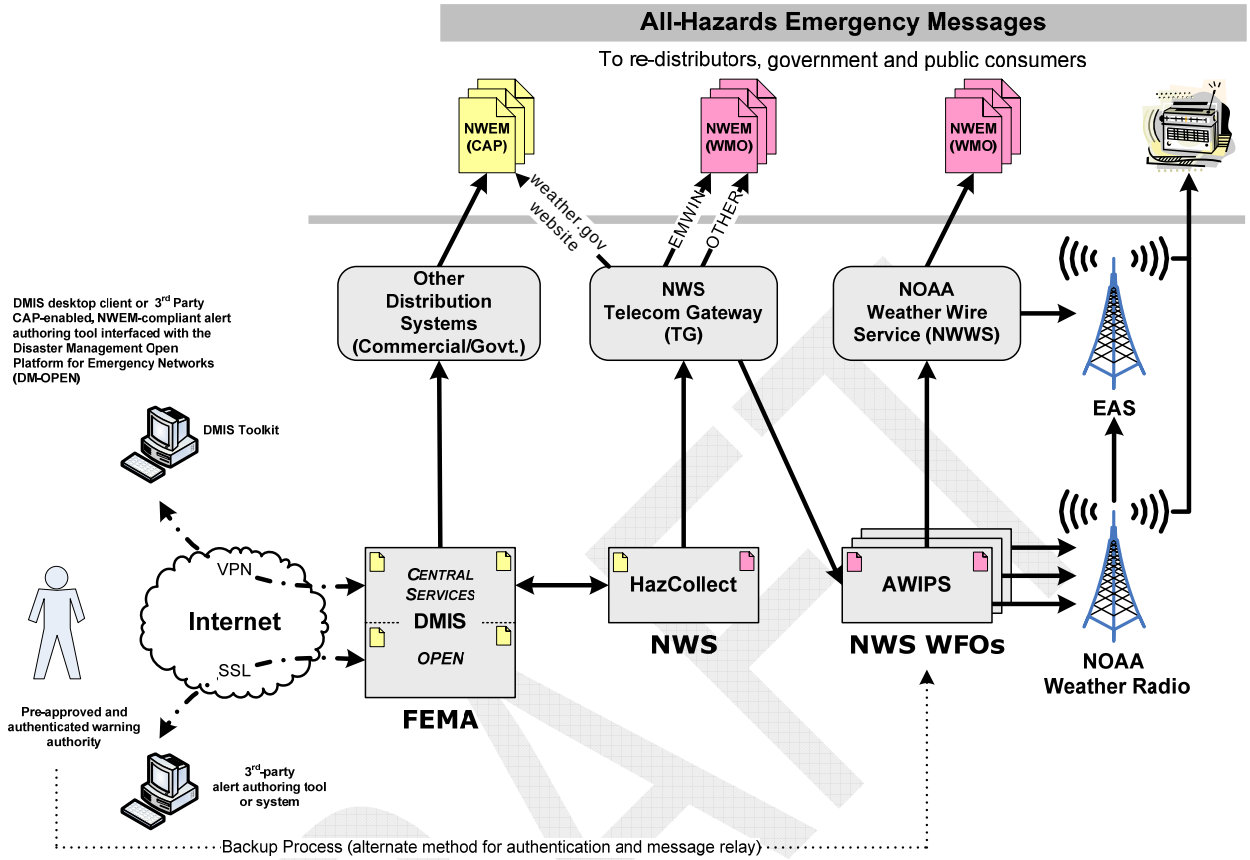

Figure 2. Emergency Message Data Flow

5.2 NWEM Posting. The primary purpose of posting an NWEM is to send it to HazCollect and other government and non-government systems for dissemination to the general public. Posting also lets the NWEM be sent to other COGs, as stipulated in their operations plans and configured in their client software. Before posting, the "Status" field must be filled in with "Actual" (or "System Exercise" or "Test"). (See Appendix B for specific steps to create and post a NWEM.) The NWEM data fields are posted to DHS's centrally located DM-OPEN server for further processing before being transmitted to the HazCollect server. Before posting, the NWEM data should receive second-person review within the participating COG for accuracy and appropriateness.

5.3 DM-OPEN Server. The centrally located DM-OPEN server automatically:

a. authenticates and authorizes the HazCollect participating COG operator by comparing the operator's ID information with its database,
b. converts the NWEM data fields from the DMIS toolkit software (or 3rd party software) into the standard CAP format, and
c. sends the CAP-formatted message to the NWS's centrally located HazCollect server for second level authorization.

If the message fails authorization at the HazCollect server (also see sections 5.4 and 6.3), an appropriate failure message is returned through the DM-OPEN server to the operator attempting to enter the NWEM. If message authorization is successful, a CAP-formatted message is posted to the DM-OPEN server for further distribution and sent to the HazCollect server.

5.4 HazCollect Server. The centrally located HazCollect server receives the CAP-formatted message from the DM-OPEN server and provides the following:

a. automated authorization of the NWEM's geographic areas,
b. conversion of the geographic areas to the appropriate UGCs, and
c. conversion of the CAP format into the World Meteorological Organization (WMO) message format for distribution through the NWS's AWIPS and other NWS systems. See Appendix E for NWEM product examples.

The HazCollect server automatically sends back to the DM-OPEN server (and to the DMIS client NWEM tool interface or to the 3rd party commercial or government system for display on the operator interface) one of the following two status messages, indicating that either:

a. the NWEM was successfully sent to NWS systems for distribution or,
b. the NWEM was not authorized and not distributed.

5.5 NWS Systems Disseminating NWEM Products. The HazCollect server then automatically delivers the NWEM products to NWS dissemination systems including AWIPS, the NWS Telecommunications Gateway (NWSTG), and the NWS web server farm for subsequent dissemination to the public. The following distribution methods are used:

a. Local radio broadcasts from each NWR station in the NWR network: AWIPS at each NWS field office sends text information, including NWEMs, to CRS where it is converted automatically into a broadcast-ready transmission and sent to the NWR stations. Through the use of SAME, the message is transmitted from NWR stations to the EAS broadcast stations. NWR broadcast occurs after a quick visual review by NWS staff in the Pending window of the NWR browser on AWIPS for any needed technical and pronunciation corrections and adjustments to ensure intelligible NWR broadcast for relay to EAS Message review will be completed expeditiously and will be only for grammatical, format and pronunciation corrections and adjustments necessary for broadcast.

b. Text product transmission: The NWSTG, NWS's centrally located primary information server, acquires, processes and disseminates messages and products from the NWS worldwide. It interfaces with users and other government agency and international systems and distributes the NWEM products, as well as all other NWS text products. In addition, AWIPS and the NWSTG distribute text products to the NWWS and EMWIN.

c. NWS web server farm: This server provides NWEM products for Internet access and distribution.

6. Authentication and Authorization Processes. This section provides details on the series of steps taken within the HazCollect process to ensure the authenticity and correct authorization of NWEM production. (See section 4.2, where the concepts of authentication and authorization are briefly introduced. Also see section 6, where the responsibilities of the respective HazCollect partner groups include these important procedures.)

6.1 Authentication. This process, primarily undertaken by DHS and also locally through appropriate emergency management groups in the hazards community, includes several steps.

6.1.1 Initial Authentication.

6.1.1.1 Registering to be a COG. A selected future COG Administrator (typically the EM or ranking support staff) or assigned contact person registers the group on the DHS DMIS web site for approval: www.disasterhelp.gov/disastermanagement/. Required information includes the name and type of organization seeking COG status, and the name, job title, telephone number and address of the Administrator (or contact person).

Upon approval, the new COG receives a COG ID which, among other purposes, is used as an official identifier for registering with the NWS for HazCollect participation (see section 6.2.1).

6.1.1.2 Assigning DMIS Roles and Privileges. The COG Administrator assigns roles and privileges to individuals within the COG to create, read, edit and post incident and emergency information into DMIS including the posting of an emergency message to HazCollect if a HazCollect-authorized COG.

6.1.2 Real-Time Authentication and Confirmation.

a. In the Login screen of the DMIS desktop toolkit, COG members, pre-approved by the COG Administrator to create or post emergency messages, enters their operator/user name in the "Operator Login Name" field and password in the "Password" field.

b. The DMIS server, using prescribed authentication processes, confirms that the identification and password are of an approved creator/poster, and allows the operator entry to the toolkit for message creation and posting.

c. After message creation, a screen called the "NWEM Public Broadcast Confirmation" appears which alerts the operator with specific cautions that the message will be "broadcast" (distributed) to the public (see section 5.2 for precise wording of this screen before the NWEM can be posted).

6.2 Authorization. This separate process, undertaken by the NWS, includes the following steps.

6.2.1 Initial Authorization (HazCollect Registration). To become a HazCollect participating

COG, a COG *must* register with the NWS on its HazCollect Internet site (www.weather.gov/os/hazcollect), providing such standard identification information as COG name and ID (received upon DHS approval as an authenticated COG) and local COG Administrator contact information, etc. Other information requested on the HazCollect registration form includes:

- "Statement of Requirement" (justification for the COG to have HazCollect NWEM post public authority -- may be statutory reference).

- "Statement of Performance" (commitment by COG Administrator to require FEMA/NWS HazCollect Principles and NWEM Best Practices training course of COG members to achieve and maintain "post" public authority. HazCollect Principles and NWEM Best Practices training course is required for COG Administrators as a pre-condition for a COG's HazCollect registration approval.) .

- "Requested Geographic Area" (state, county, city, marine zone and region, including any areas the COG may support under mutual aid agreements with other COGs. Include UGCs, if known, but the HRG will ultimately select/approve the appropriate UGCs).

- "COG Jurisdiction Below State Level" (check if state authority approval required for each NWEM post, then identify the state agency).

- "NWS Point of Contact" (identify the P.O.C.. person).

- "COG HazCollect Activation Date" (date requested on registration form).

- "Requested COG Scope Category" (national, regional, state, local, marine zone; area of responsibility scope will be assigned/approved by HRG).

Upon receipt of COG's HazCollect registration, the NWS will send back an automated e-mail, acknowledging the receipt of registration and providing additional registration approval process information. The HRG within NWS is responsible for reviewing and (as appropriate) authorizing the registrant to be an official HazCollect participant (see sections 4.3.1.1 and 4.3.1.2 for details on the HRG). The HRG generates a report on the new registrant for validation of the COG ID by the DHS DM Program Management Office.

At the end of this registrant validation process, the HRG approves (or disapproves) the HazCollect registrant as a HazCollect participant. The NWS will then send an e-mail with the approval (or disapproval and reasons for disapproval) information and provide an estimated date when the registrant's COG will become an active HazCollect COG. If approved, the registrant profile and COG data are then transferred to the HazCollect System Administrator for updating into the HazCollect server database as an active HazCollect COG.

6.2.2 Real-Time COG NWEM Validation. The ongoing process in which the HazCollect server, through look-up information in its database obtained from prior COG registration data,

automatically checks every incoming CAP-formatted NWEM to ensure the HazCollect participating COG is pre-authorized to send NWEMs for the requested geographic area.

6.3 Security Rejections. At any step in the realtime validation process, unauthenticated COGs and/or individuals or unauthorized NWEMs will be rejected causing tracking information to be automatically generated and sent back to the DM-OPEN server for further distribution to DM and HazCollect officials for appropriate action.

7. Outreach and Training. These interrelated functions are conducted by the NWS and by DHS and the respective Federal/state/local emergency management groups.

7.1 National Weather Service. The NWS provides outreach and training on several levels for various government audiences, including the following. OCWWS leads the NWS outreach effort and coordination. Information is accessible from the HazCollect web site at www.weather.gov/os/hazcollect.

a. A PowerPoint presentation, entitled "Introduction to HazCollect," provides an overview of HazCollect with slides and notes, including: what it is; its purpose, system hardware/software requirements; an operational flow diagram of the end-to-end data process; HazCollect tie-in to NWS dissemination systems; and, its benefits. This presentation is provided to NWS field offices, to various emergency management groups that are already COGs and to those groups considering DM-OPEN, DMIS and HazCollect participation.

b. A multi-format brochure on HazCollect, entitled "HazCollect: To Speed Your Emergency Message," contains information similar to the introductory Power Point presentation referred to above. The brochure includes information specifically for EMs and other government officials who are potential HazCollect participants and to decision makers.

c. Link to the FEMA/NWS HazCollect Principles and NWEM Best Practices training course. This online training course is required for COG Administrators as a pre-condition for a COG's HazCollect registration approval and strongly recommended for all COG members to achieve and maintain "post" public authority and for all operational NWS staff to achieve a better understanding of HazCollect and NWEMs.

d. Additional HazCollect outreach information, training aids and operational aids will be provided as appropriate.

7.2 Department of Homeland Security and Emergency Management Groups. DHS supplies the training and outreach and overall guidance through its Disaster Management e-Government Initiative Program Management Office,. The local emergency management groups implement the provided information into their operational incident management and HazCollect workflow. Following are some of the DHS training materials available on its web site:

a. "DMIS Training" is a comprehensive suite of courses in the form of Power Point presentations (slides and notes). These materials are organized for the four categories of DMIS students: .

- Trainers - teach all aspects of DMIS planning, installation, administration, and use
- Planners - decide how to install and use DMIS
- Administrators - install DMIS software and maintain operator roles and privileges
- Operators - use DMIS to support their work as responders.

The courses include chapters such as "Introduction to DMIS," "COG Cookbook," "DMIS Software Installation," "Getting Started," "DMIS Administration" and "DMIS Operations."

b. The latest version of "Disaster Management Interoperability Services Web Services Release Notes and Operator's Guide" is found on the Internet at www.disasterhelp.gov/disastermanagement/. This material is much more detailed and comprehensive than the DMIS training materials above. Following is some of the information presented in this Operator's Guide. The first bullet is for specific DMIS instructions. The second bullet describes specific HazCollect operator instructions for the HazCollect "Alerts Tool." .

- DMIS instructions. The bulk of this material is in the form of a "cookbook" for DMIS users and provides step-by-step instructions. The following chapter titles provide an overview of the contained information: "Getting Started," "All about COGs," "Administration," "Tactical Information Exchange (TIE)," "Using the Weather Tool," "Using the Map Tool (also known as GIS)," "Using the National Summary Map," "Using the Alerts Tool" (including the updated tool for HazCollect), "Open Source Intelligence," "Capabilities Catalog," "DMIS Messenger," and "Appendix A – Map Symbols."

- DMIS NWEM instructions. These materials provide specific operator instructions for creating and posting NWEMs to the HazCollect server using the DMIS "Alerts Tool." (See also Appendix B of this NWSI for an operator "workflow" for creating NWEMs.

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Appendix A – Non-Weather Emergency Message (NWEM) Events and Code

Appendix A - Table of Contents:

1. Introduction. 19
2. Authority. 19
3. NWEM Events and Codes. 19

1. Introduction. This Appendix includes a list of the NWEM Events and their respective Codes in alphabetical order. Only these event names and codes can be used in the creation and dissemination of NWEM products (see section 2 of this appendix for authority).

Most "Warning" events have codes that end in "W," all "Watch" events have codes that end in "A," and all "Emergency" events have codes that end in "E." These are the codes for real-time NWEMs. The "Administrative Message" that uses code "ADR" has been adopted for follow-up messages to initial W and E NWEMs. If the ADR were not used, using the original W or E code for follow-up information would cause the original W or E message to be erased on certain communications systems. Also, using the W or E as follow-up could trigger a new, separate broadcast of the event on EAS stations, which is neither desired nor the intent of the EAS process.

Important Note: The other codes (marked with an asterisk (*)) in the list in section 3 not ending in A, W, or E, generally are for administrative, demonstration or testing purposes and are not used to provide real-time alerts of hazardous situations. The CEM and EVI codes for warning messages are legacy EAS event codes that do not end in W.

2. Authority. Federal Communications Committee (FCC) on February 22, 2002, adopted a Report and Order (FCC-02-64) giving local and state EAS committees the option of using these event codes for non-weather related events. The HazCollect program has adopted these officially sanctioned event codes as the only ones to be used in the production and dissemination of NWEMs, with the exceptions for the codes with asterisks, as noted above.

3. NWEM Events and Codes. See NWSI 10-518, Non-Weather Related Emergency Product Specification, Appendix C, for comprehensive definitions, descriptions and examples of these events.

Non-Weather Emergency Events	**Codes**
Administrative Message	ADR
Avalanche Watch	AVA
Avalanche Warning	AVW
Child Abduction Emergency	CAE
Civil Danger Warning	CDW
Civil Emergency Message	CEM
Demonstration Message	DMO*

Earthquake Warning	EQW
Evacuation Immediate	EVI
Fire Warning	FRW
Hazardous Materials Warning	HMW
Law Enforcement Warning	LEW
Local Area Emergency	LAE
National Information Center	NIC*
National Periodic Test	NPT*
Network Message Notification	NMN*
911 Telephone Outage Emergency	TOE
Nuclear Power Plant Warning	NUW
Radiological Hazard Warning	RHW
Required Monthly Test	RMT*
Required Weekly Test	RWT*
Shelter in Place Warning	SPW
Volcano Warning	VOW

* These codes are used for administrative, demonstration or testing purposes.

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Appendix B – Procedures for NWEM Creation from DMIS Software

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2. Workflow. 21

1. Introduction. This Appendix provides a "workflow" to summarize the *required* steps the operator will take to create a new NWEM on the PC using the DMIS client NWEM tool. Note that screens are underlined to distinguish them from fields within screens. Most "Optional" fields are not provided here (with certain important exceptions noted within the workflow below), but operators are encouraged to fill in all optional fields, to the extent possible. See the DHS web site for the DMIS toolkit at www.disasterhelp.gov/disastermanagement/), which provides detailed information on all aspects of DMIS and NWEM creation.

2. Workflow. Following is the workflow of required steps to create an NWEM from the DMI-Services toolkit:

- Select "File."
- Select "New NWEM" from the "File" pull-down menu.

- The "New NWEM" screen opens with a number of required and optional data fields for operator entry. (As noted below, some of these fields are automatically assigned defaults – "pre-populated" − from data obtained during the initial DMIS sign-in.) Occurring before the required fields are the following pre-populated optional fields: "Version Number" (default 0 – indicates this is a working NWEM), "Sender" (the name of the COG) and "Sent ("populated" on "Save" command – the time and date NWEM was created and saved).

Following are the *required* fields for operator input from the "New NWEM" screen:

-- "Status" – field is blank and must be filled in. It identifies whether the message informs the public of an actual emergency or trains emergency response personnel. The "Status" selections are: "Not Assigned," "Actual" (a real message to the public via HazCollect to the public), "System," "Exercise" and "Test." (Note that "Actual" must be used to post the NWEM.)

Following are the *required* fields in the "New NWEM" screen that are pre-populated:

-- "Scope" - a description of the intended distribution of the NWEM that is automatically assigned the default of "Public."
-- "Type" - shows the kind of message being communicated. "Alert" is the default selection that indicates the message is an official warning or emergency notification.
-- "Identifier" - a unique ID number ("DM" followed by 19 digits) that each message has.
-- "Operator/Device ID" - a unique ID linked to the user who created the message.

At the bottom of the "New NWEM" screen is the "Alert Details" field.
- Entering the "Alert Details" field produces an overlay screen, "Additional NWEM

Information," that begins the substance of NWEM creation.

The "Additional NWEM Information" screen contains the following fields.

-- Click on "Event" field to select the "Event Type" from a pull-down menu, e.g., "Civil Danger Warning." (The "Information" button provides a detailed description of the event.)

-- Enter the headline (an optional field that is encouraged to be used), as appropriate, in the indicated "Headline" field.

-- Enter the description of the event – the body of the NWEM – in plain language in the large "Description" field.

-- Click on button on the "Description" field for pull-down menu of "Calls to Action" (CTA) or to create a new CTA. The CTA will be added to the "Description" field.

-- Enter the "Areas" field to select the COG's available geographic areas, including only those states, counties and marine areas where authorized messages can be broadcast. These are selected with a "check" next to the list of areas, which will include the geographic name and Universal Geographic Code (selected or approved by the NWS HazCollect Review Group – see section 4.3.1.2 of this NWSI) of each entry.

After a series of optional fields, provide information for the following *required* fields:

-- Select the "Duration Time" field, which is the valid time of the NWEM, up to 6 hours in 15 minute intervals.

-- Select the level of "Urgency" field, which includes "Immediate," "Expected," "Future," "Past" and "Unknown."

-- Select the level of "Severity" field, which includes "Extreme," "Severe," "Moderate," "Minor" and "Unknown."

-- Select the level of "Certainty" field, which includes "Very Likely," "Likely," "Possible" and "Unlikely."

The following optional field is likely to be used frequently, and so is included here.

-- "Category," a characterization of the event(s) described in the NWEM, includes:

- "Geo" – Geophysical, including landslides
- "Met" – Meteorological, including floods
- "Safety" – General emergency and public safety
- "Security" – Law enforcement, military, homeland and local/private security
- "Rescue" – Rescue and recovery
- "Fire" – Fire suppression and rescue
- "Health" – Medical and public health
- "Environment" – Pollution and the environment
- "Transport" – Public and private transportation
- "Infra" – Infrastructure such as utilities, telecommunications and other non-transport services, and
- "Other" – Any miscellaneous reasons

These data fields are formatted such that the DMIS server (see section 5.3 of the NWSI) can reformat them into the standard CAP (see section 5.3.1 of this NWSI).

The operator then either "Saves" the NWEM for further review and editing by COG members (recommended) or directly "Posts" it. Through use of the "Save" and "Edit" functions of the toolkit software, the NWEM can receive the recommended second-person review within the participating COG for accuracy and appropriateness.

The first step of the message "Post" function opens up the "NWEM Public Broadcast Confirmation" screen that displays the following exact words of caution, requiring operator input, followed by the actual message so it may be reviewed before posting.

> "You requested PUBLIC BROADCAST of your message."
>
> "Your message will be disseminated over public systems including NOAA Weather Radio, NOAA Weather Wire Service, EMWIN, internet, radio, and TV. EAS activation will be requested."
>
> "CAREFULLY REVIEW the message to ensure it is correct and suitable for PUBLIC broadcast outside DMIS. An INACCURATE or MISLEADING MESSAGE could have SEVERE CONSEQUENCES."

Finally, the operator must click on a button that says,

> "I confirm I have reviewed this message and it is ready for PUBLIC broadcast."

Only then can the operator click the "broadcast" button to successfully post the message to the DMIS server. (See Appendix B for the specific steps an operator will take to create and post an NWEM.)

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Appendix C – References

Appendix C - Table of Contents:

1. Introduction. 24
2. References. 24
3. Web Site References. 24

1. Introduction. This appendix lists the relevant documents, resources and Internet web sites that provide more comprehensive information and descriptions related to the HazCollect system than contained in this NWSI. Some of these references also are listed within their associated sections of this NWSI.

2. References. NWSI, part of the Directive series that provide policy and procedures, including the following that are relevant to this Instruction, are on the Internet at: http://nws.noaa.gov/directives/

a. NWSI 10-518, Non-Weather Related Emergency Product Specification

b. NWSI 10-1701, Text Product Format and Codes

c. NWSI 10-1702, Universal Geographic Code

d. NWSI 10-1710, NOAA Weather Radio (NWR) Dissemination

e. NWSI 10-1715, NOAA Weather Wire Service (NWWS) Dissemination

f. NWS Directive Series 60-7, Information Technology Security Policy

g. NWS Directive Series 30-31, Integrated Logistics Support Planning

h. NWS Directive Series 30-12, Configuration and Data Management

3. Web Site References.

National Response Framework
http://www.fema.gov/emergency/nrf/

National Response Framework, Emergency Support Function Annex #2 – Communications
http://www.fema.gov/pdf/emergency/nrf/nrf-esf-02.pdf

Federal Information Processing Standards (FIPS) Codes on the National Institute of Standards
States – http://www.it1.nist.gov/fipspubs/fip5-2.htm
Counties – http://www.it1.nist.gov/fipspubs/fip6-4.htm (non-NWS version)

OASIS Standard "Common Alerting Protocol (CAP) v1.1", October 2005
http://www.oasis-open.org/committees/emergency/

Weather Forecast Office (WFO) Information on the NOAA/NWS Management Information Retrieval System (MIRS), which provides NWS field office locations, addresses and contact information
http://www.weather.gov/mirs

NWS HazCollect web site
www.weather.gov/os/hazcollect).

DHS web site for Disaster Management Interoperability Services (DMIS).
www.disasterhelp.gov/disastermanagement/
This site includes all DMIS registration information and the current DMIS Version's "Web Services Release Notes and Operator's Guide," which provides step-by-step instructions for use of DMIS software and NWEM creation for HazCollect.

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Appendix D - Acronyms

AWIPS	Advanced Weather Information Processing System
CAP	Common Alerting Protocol
CD	Compact disk
COG	(DM) Collaborative Operations Group
CRS	Console Replacement System
CTA	Call to Action
DHS	Department of Homeland Security
DM	Disaster Management
DMIS	Disaster Management Interoperability Services
DM-OPEN	Disaster Management Open Platform for Emergency Networks
EAS	Emergency Alert System
EM	Emergency Management or Emergency Manager
EMWIN	Emergency Managers Weather Information Network
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FIPS	Federal Information Processing Standards
HazCollect	All-Hazards Emergency Message Collection System
HRG	HazCollect Review Group
HSA	HazCollect System Administrator
IT	Information Technology
MIRS	Management Information Retrieval System
NAWAS	National Warning System
NCF	Network Control Facility
NOAA	National Oceanic and Atmospheric Administration
NWEM	Non-Weather Emergency Message
NWR	NOAA Weather Radio All Hazards

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NWS	National Weather Service
NWSH	National Weather Service Headquarters
NWSI	National Weather Service Instruction
NWSTG	National Weather Service Telecommunication Gateway
NWWS	NOAA Weather Wire Service
OCIO	Office of Chief Information Officer
OCWWS	Office of Climate, Water and Weather Services
OOS	Office of Operational Systems
OPEN	Open Platform for Emergency Networks
OST	Office of Science and Technology
PC	Personal Computer
SAME	Specific Area Message Encoding
SLO	State Liaison Office
SSL	Secure Sockets Layer
TG	(NWS) Telecommunications Gateway
TIE	Tactical Information Exchange
UGC	Universal Geographic Code
VPN	Virtual Private Network
WCM	Warning Coordination Meteorologist
WFO	Weather Forecast Office
WMO	World Meteorological Organization

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Appendix E – NWEM Product Examples

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2. Generic Format. 28
3. Operational Format. 29
4. Test Format. 30

1. Introduction. The official NWEM NWS/WMO product format consists of plain language text and codes, following the rules in NWSI 10-1701, Text Product Format and Codes; NWSI 10-1702, Universal Geographic Code (UGC); and NWSI 10-518, Non-Weather Related Emergency Products Specification, which provides specific details on NWEM products, including definitions, formats and more examples. A few modifications to this format for NWEMs are found in the examples and explanatory Notes at the end of this section.

The following generic and completed examples are representative of the typical message types. On the left side of each example is the NWEM format; on the right side is a description of each format line in parentheses.

Notes:

(1) The Broadcast Instruction line, "BULLETIN – EAS ACTIVATION REQUESTED," is the same for all NWEMs, and is inserted automatically by the HazCollect server.
(2) The "Information Source" line is inserted automatically by the HazCollect server, as supplied by the originating COG via its initial registration with the NWS to be a HazCollect participant (see section 6.2).
(3) The EM (or other) operators will not see either of the above lines in notes 1 or 2 when creating the NWEM, since these lines are inserted after the NWEM is posted.
(4) The (optional) headline(s), a free text field, should be made as direct and actionable as possible while remaining short. CAP limits headline length to 160 characters.
(5) The free-text narrative section is limited to 200 words for all NWEM products by the OPEN/DMIS/HazCollect software to accommodate the 2-minute maximum audio length imposed by the EAS.
(6) Any follow-up NWEM to an initial NWEM shall use the title "ADMINISTRATIVE MESSAGE/FOLLOW UP STATEMENT" and the code "ADR." (See example 3 above.)
(7) The Test format example (and all NWEM test products) includes the same automated text, "…THIS IS A TEST MESSAGE. DO NOT TAKE ACTION BASED ON THIS MESSAGE…," inserted automatically before and after the test narrative text line(s) by the DMIS toolkit software.

2. Generic Format. The generic format uses symbolic characters and applies to all operational NWEMs that are relayed in the contiguous U.S. and Puerto Rico. (The generic format for the Alaska Region is the same, except that the UGC uses the zone, or "Z," form, rather than the county, or "C," form.)

Product Format	Format Line Description

WOUSii cccc ddhhmm	*(WMO Heading)*
nnnxxx	*(AWIPS ID)*
stC001-002-003-004-005>015-ddhhmm-	*(UGC: **C** & Product expiration)*
	(blank line)
BULLETIN - EAS ACTIVATION REQUESTED	*(Broadcast Instruction-automated)*
Non-Weather related Emergency Message	*(Product name)*
COG Name City State	*(Requesting COG)*
RELAYED BY NATIONAL WEATHER SERVICE City State	*(NWS Relaying Office)*
time am/pm time_zone day mon dd yyyy	*(Issuance time/date)*
	(blank line)
...[Headline(s)]...	*(Optional)*
	(blank line – optional)
"The following message is transmitted at the request of (the COG Name)"	*(Information Source)*
	(blank line
[Narrative Text – typically multiple lines]	(narrative text-begins)
.	
[Narrative Text]	(narrative text-ends)
	(blank line)
$$	*(UGC Delimiter)*
DMIS Operator ID	(*Operator Security Code*)

3. Operational Format. These examples follow the standardized NWEM format similar to that used by NWS operational products and adheres to the generic format above.

3.1 Initial NWEM. Example: Initial Shelter-in-Place Warning

Product Format	Format Line Description
WOUS44 KLCH 140927	*(WMO Heading)*
SPWLCH	*(AWIPS ID)*
LAC019-141700-	*(UGC: **C** & Product expiration)*
	(blank line)
BULLETIN - EAS ACTIVATION REQUESTED	*(Broadcast Instruction-automated)*
SHELTER IN PLACE WARNING	*(Product name)*
CALCASIEU PARISH OFFICE OF EMERGENCY PREPAREDNESS LAKE CHARLES LA	*(Requesting COG)*
RELAYED BY NATIONAL WEATHER SERVICE LAKE CHARLES LA	*(NWS Relaying Office)*
412 AM CDT WED MAY 14 2003	*(Issuance time/date)*
	(blank line)
THE FOLLOWING MESSAGE IS TRANSMITTED AT THE REQUEST OF THE CALCASIEU PARISH OFFICE OF EMERGENCY PREPAREDNESS.	*(Information Source)*
	(blank line)
THE CALCASIEU PARISH OFFICE OF EMERGENCY PREPAREDNESS HAS ISSUED A SHELTER IN PLACE WARNING FOR ALL AREAS WITHIN 3 MILES OF THE CONOCO PLANT. THERE HAS BEEN A RELEASE OF SULPHER DIOXIDE AND HYDROGEN FROM THE CONOCO PLANT.	*(Narrative Text-begins)*
THE DIRECTION OF THE WIND IS LIGHT AND VARIABLE AT THE PRESENT TIME. WINDS FROM THE SOUTH AROUND 5 MPH ARE EXPECTED AROUND 7 AM.	

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SHELTER-IN-PLACE MEANS PROTECTING YOURSELF WHERE YOU ARE AND STAYING THERE UNTIL GIVEN FURTHER INSTRUCTIONS OR THE ALL-CLEAR.	
SHELTER-IN-PLACE WARNING ACTIONS 1. GO INSIDE 2. CLOSE ALL DOORS 3. TURN OFF ALL VENTILATION SYSTEMS 4. TUNE TO LOCAL NEWS MEDIA FOR FURTHER INFORMATION	
A GRAPHICAL PRESENTATION OF THE SHELTER-IN-PLACE CAN BE FOUND ON THE NWS WEB SITE AT WWW.SRH.NOAA.GOV/LCH.	*(Narrative Text-ends)*
	(blank line)
$$	*(UGC Delimiter)*
DM3412790689473688513/9374636872156483379	(*Operator ID Security Code*)

3.2 Follow-up NWEM. The follow-up NWEM to the initial NWEM is given the product type title "ADMINISTRATIVE MESSAGE/FOLLOW UP STATEMENT" and uses the ADR (Administrative Message) code.

Product Format	Format Line Description
WOUS44 KLCH 141028	*(WMO Heading)*
ADRLCH	*(AWIPS ID)*
LAC019-141100-	*(UGC: **C** & Product expiration)*
	(blank line)
BULLETIN - EAS ACTIVATION REQUESTED	*(Broadcast Instruction-automated)*
ADMINISTRATIVE MESSAGE/FOLLOW UP STATEMENT	*(Product name)*
CALCASIEU PARISH OFFICE OF EMERGENCY PREPAREDNESS LAKE CHARLES LA	*(Requesting COG)*
RELAYED BY NATIONAL WEATHER SERVICE LAKE CHARLES LA	*(NWS Relaying Office)*
526 AM CDT WED MAY 14 2003	*(Issuance time/date)*
	(blank line)
THE FOLLOWING MESSAGE IS TRANSMITTED AT THE REQUEST OF THE CALCASIEU PARISH OFFICE OF EMERGENCY PREPAREDNESS.	*(Information Source)*
	(blank line)
THE CALCASIEU PARISH OFFICE OF EMERGENCY PREPAREDNESS HAS ISSUED AN ALL-CLEAR FOR THE SHELTER-IN-PLACE WARNING PREVIOUSLY ISSUED FOR CALCASIEU PARISH ADJACENT TO THE CONOCO PLANT.	*(Narrative Text-begins)*
IT IS NO LONGER NECESSARY TO SHELTER-IN-PLACE	*(Narrative Text-ends)*
	(blank line)
$$	*(UGC Delimiter)*
DM3837636345638395624/7436453420377884654	(*Operator ID Security Code*)

4. Test Format. This format, basically adhering to the generic format, differs only in that an automated headline announcing the product is only a test is inserted at the beginning and end of

the narrative text. This format is used when COGs are providing an NWEM product for purposes of testing communications systems, etc. This example is a Test Follow-up Statement.

Product Format	Format Line Description
WOUS41 KALY 021608	*(WMO Heading)*
ADRALY	*(AWIPS ID)*
NYC001-021623-	*(UGC: **C** & Product expiration)*
	(blank line)
BULLETIN - EAS ACTIVATION REQUESTED	*(Broadcast Instruction-automated)*
TEST…ADMINISTRATIVE MESSAGE/FOLLOWUP STATEMENT…TEST	*(Product name)*
ALBANY COUNTY OFFICE OF EMERGENCY MANAGEMENT ALBANY NY	*(Requesting COG)*
RELAYED BY NATIONAL WEATHER SERVICE ALBANY NY	*(NWS Relaying Office)*
1208 PM EDT FRI SEP 2 2005	*(Issuance time/date)*
	(blank line)
…THIS IS A TEST MESSAGE. DO NOT TAKE ACTION ON THIS MESSAGE…	*(Automated Headline- not optional)*
	(blank line)
…TEST…THIS IS TEST SITUATION TR26…TEST	*(Headline-optional)*
	(blank line)
THE FOLLOWING MESSAGE IS TRANSMITTED AT THE REQUEST OF THE ALBANY COUNTY OFFICE OF EMERGENCY MANAGEMENT.	*(Information Source)*
	(blank line)
THIS IS A TEST…OF A NEW CAPABILITY TO RELAY NON-WEATHER RELATED MESSAGES USING NATIONAL WEATHER SERVICE SYSTEMS.	*(Narrative Text-begins)*
IF THIS WERE REAL…THE INFORMATION HERE WOULD DESCRIBE WHAT THE SITUATION WOULD BE… WHO WOULD BE AFFECTED…WHAT THEY SHOULD DO… AND WHERE YOU COULD GET ADDITIONAL INFORMATION.	
	(blank line)
THIS IS JUST A TEST…WE APOLOGIZE FOR ANY INCONVENIENCE.	*(Narrative Text-ends)*
	(blank line)
…THIS IS A TEST MESSAGE. DO NOT TAKE ACTION ON THIS MESSAGE…	*(Automated Headline- not optional)*
	(blank line)
$$	*(UGC Delimiter)*
DM4937659093105576960/5712239571143566336	(*Operator ID Security Code*)

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