



FEMA DIRECTIVE – USE OF THE UNITED STATES NATIONAL GRID (USNG)

- I. **TITLE:** Use of the United States National Grid (USNG)
- II. **DATE OF ISSUANCE:** October 15, 2015
- III. **POLICY STATEMENT:** FEMA will use the United States National Grid (USNG) as its standard geographic reference system for land-based operations and will encourage use of the USNG among whole community partners. FEMA will reference and employ the USNG in doctrine, relevant preparedness and grant programs, deliberate and crisis-action planning, training, exercises, operations, logistics, and other appropriate disciplines.
- IV. **PURPOSE:** The purpose of this Directive is to require use of the USNG as FEMA's standard geographic reference system across all preparedness, mitigation, response, and recovery activities as well as land-based and land-air operations and to provide instruction for effective implementation.
- V. **SCOPE AND EXTERNAL AUDIENCE:** This Directive applies to all FEMA programs that implement or support disaster operations, all programs that require location reference, and the employees who implement such programs.
- VI. **OBJECTIVES:** Directive objectives are (1) to ensure FEMA utilizes a standard point and area reference system to: define operational areas, designate areas of responsibility, maintain accurate situational awareness, and effectively deliver emergency management assistance even when traditional location references are damaged, destroyed, or unavailable; (2) to ensure FEMA incorporates a uniform location language across all planning and preparedness efforts, including doctrine, guidelines, training and exercises; and (3) to encourage the adoption of the USNG among whole community partners.
- VII. **DEFINITIONS, ABBREVIATIONS, AND FORMATTING:**
 - a. **DSAT** - Disaster Survivor Assistance Team.
 - b. **ESF** - Emergency Support Function.



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- c. FEMA - Federal Emergency Management Agency.
- d. GPS – Global Positioning System.
- e. IAP - Incident Action Plan.
- f. NIMS – National Incident Management System.
- g. PDA(s) - Preliminary Damage Assessments.
- h. USNG - United States National Grid as described by the Federal Geographic Data Committee (FGDC-STD-011-2001).

VIII. POLICY DETAILS:

a. Overview

Effective preparedness for, response to, and recovery from large-scale and catastrophic incidents affecting multiple jurisdictions requires the use of a uniform point and area reference system. Lessons learned from several large-scale disasters¹ within the past three decades highlight the need for a common, geographic reference system in order to anticipate resource requirements, facilitate decision-making, and accurately deploy resources. While existing data collection and geographic technologies support some decision-making requirements, integration of the USNG into these technologies allows them to deliver fully functional location-enabled decision support. Decision support tools that apply the USNG enable emergency managers to locate positions and identify areas of interest or operations where traditional references (i.e., landmarks or street signs) may be destroyed, damaged, or missing due to the effects of a disaster. Implementing a common location reference for daily and disaster operations ensures familiarity and increases capability to consistently and accurately communicate critical location-enabled information in often austere environments of disaster operations.

¹ Including but not limited to the after-action-reports from Hurricane Andrew, Hurricane Katrina, the 2004-2005 State of Florida hurricane season, and Hurricane Sandy.



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The USNG is a point and area reference system that provides for actionable information using a uniform location language. Its use promotes consistent situational awareness across all levels of government, disciplines, threats and hazards – regardless of an individual or program’s role. The USNG is functionally equivalent to the Military Grid Reference System in use by the Department of Defense and National Guard. The USNG is simple to teach, learn, and apply to decision support needed for risk assessment, planning, response, and recovery operations. It can be used within and across diverse geographic areas and disciplines, including by private citizens, public agencies, voluntary organizations, and commercial enterprises.

By adopting and implementing the USNG as the standard, FEMA and its partners will be better able to:

1. Describe the location of disaster survivors and responders, and/or operational areas and requirements when GPS, existing mapping programs, or traditional landmarks are not reliable or available to responders;
2. Advance implementation and sustain use of a nationally consistent location language that is seamless across agencies and jurisdictional boundaries and interoperable;
3. Communicate location information and situational awareness to mutual aid partners that may be unfamiliar with communities and geographies they are responding to;
4. Ensure resources operating within the same geographic area are required and appropriate and are not redundant;
5. Use compatible location language across jurisdictions and mapping systems to communicate data across different platforms; and
6. Identify and define geographic boundaries of potential and real-world incident sites using a common grid reference system for pre-scripted mission planning and management of resources during incident



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operations to more accurately address requirements in affected areas and potentially reduce costs.

b. Expectations for FEMA Use of USNG

FEMA will use the USNG as its standard geographic reference system for implementation of national, regional, and field programs, to include encouraging federal, state, local, tribal, territorial, voluntary organizations, and private sector partners to adopt the USNG in their own planning and operations activities.

1. FEMA will integrate the use of USNG to plan for, exercise, and conduct all response and recovery operations. In order to accomplish this FEMA will ensure the following:
 - a. Deploy, manage, and track all resources involved in incident management using USNG and physical or street address if available. This includes Incident Action Plans, resource trackers and reporting, and Individual Assistance (IA) and Public Assistance (PA) program information.;
 - b. Develop, maintain, and communicate all situational assessments and associated products, including situation reports (SITREPs), operations briefs and other ad hoc reports using the USNG. These include products produced by watch centers, field offices, regional and national coordination centers and informational products produced by program offices supporting incident operations;
 - c. Use USNG coordinates as the means to set forth the area of operations and ensure accountability and management of resources in the field including reporting on Disaster Survivor Assistance, Urban Search and Rescue, IA and PA, and other field operations as required;
 - d. Encourage and provide information on the use of the USNG in NIMS-related programs, guidance, and training;



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- e. Incorporate the use of the USNG (as previously established) within FEMA’s exercise programs including:
 - i. FEMA-led exercises designed to test agency plans, policies, and procedures; and
 - ii. FEMA-supported exercises through the National Exercise Program.
- f. FEMA grants programs will include information in all grant guidance and recommend the use of the USNG for planning, operations, equipment, training, and exercise efforts across the whole community;
- g. Identify, develop and prescribe training requirements for specific user communities;
- h. Incorporate the USNG into its Data Governance Program.
The FEMA Data Governance Board helps maximize the value of data by defining how FEMA uses, shares, and proactively monitors data within the Agency. Data will be organized in data families and the USNG will be incorporated into the location data family as a key data element; and
- i. Incorporate USNG into all FEMA systems as an architectural standard.

FEMA programs and staff are encouraged to find additional areas to integrate the USNG into program initiatives and products. Additionally, opportunities to socialize and/or encourage the use of the USNG among state, local, tribal, territorial, voluntary organizations, and private sector partners should be maximized during outreach and engagement activities.²

² Additional resources and information can be located at the Federal Geographic Data Committee at: <http://www.fgdc.gov/usng/>.



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IX. ROLES & RESPONSIBILITIES:

a. **Director of Disaster Operations (DDO)**, is responsible for the implementation of this Directive, including oversight, coordination across FEMA directorates and Regions, and routine review of this guidance. The DDO shall approve any investments requested for purchase, retention, and geo-tagging requirements as described in this memo.

1. **Assistant Administrator for Recovery** is responsible for using the USNG in Individual and Public Assistance program efforts as described in section VIII.b (Expectations for FEMA Use of USNG).
2. **Federal Coordinating Officers (FCOs) and Federal Disaster Recovery Coordinators (FDRCs)** are responsible for ensuring adoption and implementation of the USNG in the programs, products, and activities identified in Section VIII.b (Expectations for FEMA Use of USNG) for and during disasters to which they are activated and/or deployed.
3. **National and Regional Incident Management Assistance Teams (IMAT)** are responsible for using the USNG in planning and operations efforts as described in Section VIII.b (Expectations for FEMA Use of USNG). National and Regional IMAT teams should also be ready to support state, local, territorial, and tribal partners in implementing the USNG during disaster response and recovery efforts when deployed.
4. **FEMA Geospatial Information Officer** is responsible for integrating the USNG in appropriate FEMA mapping programs and products. Additionally, the Geospatial Information Officer should be prepared to serve as a technical expert on the USNG and provide FEMA leadership with information and advice related to the program as requested. The ORR Geospatial Information Office



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shall promulgate guidance on the degree of precision expected for reporting the locations of different classes of assets. The Geospatial Information Officer is responsible for coordinating / managing relationships with National Geospatial-Intelligence Agency, U.S. Geological Survey, Federal Geographic Data Committee, and other agencies as related to the USNG.

- b. Deputy Administrator for Protection and National Preparedness** is responsible for overseeing, implementing, and ensuring use of the USNG in training and exercise programs, as well as ensuring preparedness doctrine, policy, and grant guidance support adoption and implementation of the USNG.

 - 1. Assistant Administrator for Grant Programs** is responsible for coordinating with the Response Directorate to ensure grant guidance contains information related to USNG efforts, and when necessary, communicating and informing the DDO of requests for assistance and technical support related to the USNG from grantees.
- c. Administrator, U.S. Fire Administration** is responsible for the implementation of the USNG in the programs and activities established by the Fire Prevention and Control Act of 1974 as amended.

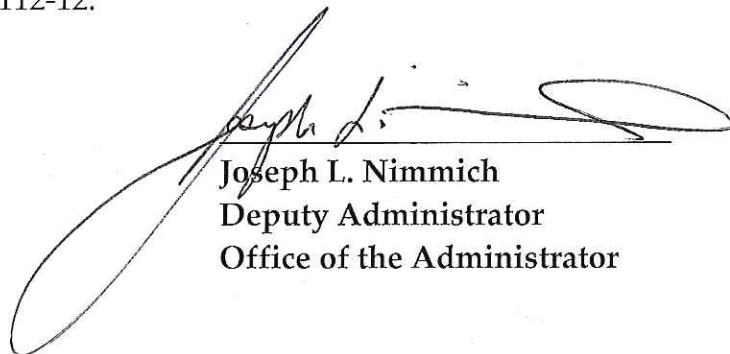
 - 1. Superintendent, National Fire Academy**, is responsible for the inclusion of the USNG, as appropriate, in the curriculums for the professional development of Fire and Fire Based EMS Services personnel.
 - 2. Director National Fire Programs**, is responsible for encouraging all fire departments to adopt and use the USNG in responding to incidents, upgrading the National Fire Incident Reporting System



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to accept USNG locations as well as utilizing USNG, as appropriate, in the fire prevention public education and outreach activities.

- d. **Regional Administrators** are responsible for overseeing and implementing the USNG in all programs identified in Section VIII.b (Expectations for FEMA Use of USNG) within their respective Region.
 - e. **Office of Chief Counsel** is responsible for setting forth guidance on the use of the USNG in a manner that preserves individual and corporate privacy while also meeting the Agency's mission for open data sharing and transparency to inform operations.
 - f. **Office of the Chief Information Officer** is responsible for incorporating the USNG into FEMA actionable architecture and all future system modernization efforts.
 - g. **Data Governance Board** is responsible for incorporating the use of the USNG within the FEMA data environment.
- X. **RESPONSIBLE OFFICE:** Response Directorate, Office of Policy and Doctrine.
- XI. **REVIEW DATE:** This policy will be reviewed 3 years from the date of issuance in accordance with Directive 112-12.



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Office of the Administrator