



U.S. DEPARTMENT OF HOMELAND SECURITY

FISCAL YEAR 2011

HOMELAND SECURITY GRANT PROGRAM

**SUPPLEMENTAL RESOURCE:
NATIONAL INFORMATION EXCHANGE MODEL
(NIEM) GUIDANCE**



U.S. DEPARTMENT OF HOMELAND SECURITY

NIEM Guidance

Purpose

This document is intended to provide Federal Emergency Management Agency (FEMA) grant recipients with an overview of the National Information Exchange Model (NIEM) and how to utilize funds received through FEMA funded awards towards information exchange and interoperability activities. The NIEM planning, information exchange development, governance and training activities described in this guidance will often be performed within the context of a larger exchange development program. This guidance will further describe the intended scope of NIEM within your project.

Background

The National Information Exchange Model (NIEM) is a collaborative partnership between the Department of Homeland Security (DHS) and the Department of Justice (DOJ) to enable streamlined information sharing between Federal, State, Local, Tribal, private sector and international partners. NIEM allows disparate systems to share, exchange, accept, and translate information in an efficient manner. Rather than seeking nationwide integration of all Federal, State, Local and Tribal information systems, NIEM focuses on cross-domain information exchange potential across multiple levels of government, thereby allowing organizations and agencies to share information quickly and effectively without rebuilding systems.

All 50 states use NIEM in some capacity, and at differing levels of maturity. NIEM is not a software program, a computer system or a data repository, but it is framework made up of two key components:

- A data dictionary of 6,000 agreed-upon terms that are commonly used in an information exchange, and
- A repeatable, reusable process for developing information exchange requirements.

The resulting work product is an IEPD, or Information Exchange Package Documentation, which is a set of artifacts that define a particular data exchange (the process is outlined below in the IEPD Lifecycle section). For example, there is an IEPD that defines the information content and structure for an Amber Alert -- a bulletin or message sent by law enforcement agencies to announce the suspected abduction of a child. IEPDs support reuse, ultimately resulting in more effective operations with reduced costs.

NIEM provides a common, mutually accepted and mature development process for defining and implementing data exchanges between systems, which can then be reused. NIEM is designed to provide quicker access to, and better understanding of, data that crosses system, agency and jurisdiction borders. This expedient access to data minimizes interagency mistrust by improving transparency, data quality and accountability through the establishment of authoritative sources for information. NIEM also enables improved decision making capabilities, and provides greater agility and

efficiency in satisfying business needs and implementing repeatable processes which may result in increased cost avoidance.

Allowable Uses of NIEM Funds

The list below includes a description of each funding type and how these funds can specifically be used in support of NIEM. They are organized into categories based on the NIEM process or lifecycle activity associated with the allowable funding, including a more detailed description of the NIEM activities and processes. Further information about NIEM can be found on the NIEM website: <http://NIEM.gov/grants.php>.

A. Information Exchange and Development Activities

Funds used for planning activities refer to all NIEM strategic planning activities, including the creation of documentation to support domain and/or governance activities, meetings with key stakeholders within the same domain and creation of artifacts in the first two planning stages of the IEPD Lifecycle, including “Scenario Planning” and “Analyze Requirements.” In addition, funds used for the development of exchanges include creation of IEPD artifacts and technical documentation, specifically in the last four phases of the IEPD Lifecycle, including “Map and Model,” “Build and Validate,” “Assemble and Document” and “Publish and Implement.” For detailed descriptions of these phases within the IEPD lifecycle, this information is made available at <http://NIEM.gov/grants.php>.

If funds are to be used for licensing of tools, only allowable vendors whose systems and tools are approved by the NIEM PMO may be considered. For further information, please contact NIEMPMO@NIEM.gov.

B. Governance and Communications Activities

Funds used for governance purpose(s) refer to participation in NIEM Governance or NIEM Committee activities and/or supporting committees that enhance the mission of current and future NIEM domains, including meetings, training, workshops, conferences or development of committee and/or domain materials in support of these committees and groups.

C. Training and Travel Activities

There are a number of NIEM training and travel activities in which NIEM community users can become involved. Funds used for training pertains to the costs associated with virtual and in-person participation in NIEM training courses, NIEM-related workshops/conferences and the National Training Event (NTE). These courses and other events must be approved by the NIEM PMO. For a complete listing, please contact NIEMPMO@NIEM.gov.

Funds used for travel must pertain to allowable costs associated with the activities outlined in the above Allowable Uses of NIEM Funds section. Travel costs can include accommodations, transportation, meals and mileage for these activities. These costs must be reasonable and conform to the General Services Administration (GSA) schedule regarding all per diem travel expenses.

References

For specific information pertaining to resources referenced in this guidance, please refer to <http://NIEM.gov/grants.php>.

- Structure of NIEM
- Domain Management (including Domain Management Model)
- IEPD Lifecycle phases
- NIEM governance structure

Listed below are other online resources available on the NIEM website (<http://NIEM.gov>) to those seeking further information about NIEM, the NIEM community and/or any information provided in this guidance.

Documentation and Standards

- Introduction to NIEM
- Concept of Operations
- User Guide
- NIEM Naming and Design Rules (NDR)
- Techniques for Building and Extending NIEM
- NIEM High-Level Tool Architecture
- NIEM High-Level Version Architecture

Training and Technical Assistance

- NIEM Training courses
- National Information Sharing Standards (NISS) Knowledge Base and Help Desk

Tools

- Lifecycle artifact templates
- Subset Schema Generation Tool (SSGT) and graphical browser (NIEM Tools)
- DHS Data Architecture Repository (DAR)
- DOJ IEPD Clearinghouse