

A photograph of the United States flag waving in the wind, set against a backdrop of snow-capped mountains under a clear blue sky. The flag is positioned on the left side of the frame, with its stripes extending towards the right.

U.S. DEPARTMENT OF HOMELAND SECURITY

FISCAL YEAR 2012

HOMELAND SECURITY GRANT PROGRAM

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



U.S. DEPARTMENT OF HOMELAND SECURITY

Purpose

This document is intended to provide Federal Emergency Management Agency (FEMA) grant recipients an overview of the National Information Exchange Model (NIEM) and how to utilize funds received through FEMA funded awards for 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

NIEM, the National Information Exchange Model, provides a commonly understood way to connect data that improves government decision making for the greater good. The use of NIEM does not require building a new system or purchasing new technology. NIEM is technology agnostic and addresses the data layer, which means you can use NIEM irrespective of the particular technologies used within an organization.

NIEM is a collaborative partnership between the Department of Homeland Security (DHS), the Department of Justice (DOJ), and the Department of Health and Human Services (HHS) to enable streamlined information exchange between Federal, State, local, tribal, private sector and international partners. As a government-wide common vocabulary and mature framework, NIEM enables communities of people to “speak the same language” as they share, exchange, accept, and translate information efficiently.

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. Rather NIEM is a consistent starting point to assist users in adopting a standards-based approach to exchanging data, including a data model, governance, training, tools, technical support services, and an active community.

The resulting work product of NIEM is an IEPD, or Information Exchange Package Documentation, which is a set of artifacts that define a particular data exchange. 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.

An IEPD includes the XML schemas that define the XML message structure and contains standardized artifacts that document an information exchange. An IEPD does not specify how exchange data is physically transferred between entities, describe an interface, or specify any technical information outside of the message structure. Once an IEPD is created, it is best practice to upload the IEPD to the IEPD Clearinghouse (<http://it.ojp.gov/framesets/iepd-clearinghouse-noClose.htm>). This allows other community members the ability to search for and potentially discover existing IEPDs of similar scope which can be reused in whole or in part to speed development and lower the cost of exchanging information.

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: <https://www.niem.gov>.

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 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 <https://www.niem.gov>.

If funds are to be used for licensing of tools, only allowable vendors whose systems and tools are approved by the NIEM Program Management Office (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, IEPD projects, NIEM standards development, or NIEM Committee activities and/or supporting committees that enhance the mission of current and future NIEM domains. This includes 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 members 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). For further information, 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 the NIEM website (<https://www.niem.gov>).

Listed below are other online resources available on the NIEM website 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
- National Information Sharing Standards (NISS) Knowledge Base and Help Desk

Tools

- Lifecycle artifact templates
- Subset Schema Generation Tool (SSGT) and graphical browser (NIEM Tools)
- IEPD Clearinghouse
- Additional tools are available, please visit <https://www.niem.gov> or contact NIEMPMO@niem.gov for more information