

### 1.1.5 FAQs

#### **What is NIEM?**

A national initiative supported by the Federal government, NIEM is a means of connecting communities of people who share a common need to exchange information in order to advance their missions.

#### **What is NIEM's mission?**

NIEM's mission is to provide a commonly understood way to connect data that improves government decision-making for the greater good.

#### **What is NIEM's vision?**

The vision of the NIEM community is that it will become the standard, by choice, for intergovernmental information exchange. Practitioners of all levels of government and industry will share accurate, complete, timely and appropriately secured information to enable informed decision-making. NIEM will provide a common vocabulary to promote consistency and understanding among domains to simplify the process of information sharing.

#### **What problem does NIEM seek to solve?**

Information is among our nation's most valuable assets. Yet most of these assets are locked away in disconnected systems across a multitude of data centers. NIEM breaks down these interagency stovepipes and connects agencies so that they may develop innovative, data-driven, mission-focused standards by eliminating debate around data standards. NIEM also seeks to create a community that supports the sharing of critical data to improve organizational efficiency, save time and money, and contribute to the greater good.

#### **How can NIEM benefit my organization?**

- NIEM saves time and money and enhances operation efficiency by eliminating debate around data standards and shortening the time frame for information exchange development.
- NIEM helps government agencies advance their missions and improve the quality of their service to the public.
- By reducing data processing time, NIEM quickly puts actionable information in the hands of decision makers.
- Because NIEM components and artifacts are reusable, NIEM allows you to do more with less and achieve greater return on investment.

To learn more about NIEM's benefits, check out [Why NIEM?](#) [\[Link to Why NIEM page\]](#)

#### **Who is currently participating in NIEM?**

NIEM currently incorporates 12 domains, including biometrics; child, youth, and family services; cyber; justice; emergency management; infrastructure protection; information assurance; immigration; intelligence; international trade; maritime; and screening.

NIEM's stakeholders include executives, practitioners, program managers, subject-matter experts, technologists, product developers, academia, standards bodies, sponsors, media and private industry. These stakeholders comprise the communities of interest (COIs) responsible for developing, harmonizing, and managing NIEM's data components.

#### **Which agencies are currently testing NIEM pilots?**

Operational stakeholders and practitioners from all levels and branches of government can get directly involved in NIEM, as can private sector solution providers, in designing these enterprise-wide information sharing capabilities.

**Will NIEM replace my existing hardware, databases, or software?**

NIEM is non-intrusive to existing systems, and does not require new or different hardware. As a result, NIEM allows organizations to move information quickly and effectively without replacing or rebuilding systems.

NIEM is built on eXtensible Markup Language (XML), which is platform-independent. Systems must simply incorporate a translation mechanism between their data sources and the messaging infrastructure to map incoming and outgoing messages to their own data, which need not be altered. This implementation model is flexible because it does not require agencies to change their existing systems and databases or the way they currently do business, yet it opens up the possibilities for data exchange among other agencies with very little effort.

**Are data exchanges through NIEM secure and private?**

NIEM is simply the translator of the message; the IT systems sending and receiving that message have security built into them. Further, NIEM allows you to share only the information you want to share.

**How is NIEM managed/governed?**

NIEM is a multi-agency information-sharing program. Intergovernmental groups representing key stakeholders play an important role in creating and sustaining partnerships. Partners can share knowledge and resources across the government and ensure that NIEM provides true value to citizens.

NIEM governance bodies include the executive steering committee (ESC), policy advisory panel, NIEM Program Management Office (PMO), and stakeholder committee. The NIEM Executive Steering Committee represents key public decision makers from state, local, tribal and federal agencies with a significant vested interest in NIEM objectives. The ESC provides strategic direction to the Program Management Office, whose responsibilities are to oversee the implementation and development of NIEM.

**What other standards does NIEM leverage?**

NIEM leverages the data exchange standards efforts successfully implemented by the Global Justice Information Sharing Initiative (Global) and extends the Global Justice XML Data Model (GJXDM) to facilitate timely, secure information sharing.

**What is a domain?**

A domain is a business enterprise that broadly reflects the agencies, units of government, operational functions, services, and information systems that are organized or affiliated to meet common objectives.

An example of a domain currently involved in NIEM is *Justice*. The *Justice* domain includes information of interest to governmental and quasi-governmental agencies, such as law enforcement, prosecution, defense, correctional supervision, and the judiciary, whose responsibilities include reporting and investigating crimes, apprehending suspected offenders, providing services to victims and the general public, and prosecuting those charged with criminal offenses; as well as adjudication, pre-trial services, judicial processing and sentencing, and correctional confinement and supervision, among others.

**What domains are currently participating in NIEM?**

NIEM currently addresses the following domains:

- Biometrics
- [CBRN \(Chemical, Biological, Radiological, Nuclear\)](#)
- Cyber
- [Emergency Management](#)

- [Immigration](#)
- [Infrastructure Protection](#)
- [Intelligence](#)
- [International Trade](#)
- [Justice](#)
- [Maritime](#)
- [Screening](#)
- [Child, Youth and Family Services](#)

### **What is a community of interest (COI)?**

Communities of interest (COIs) are groups of people (e.g., committees, working groups or technical subcommittees) who authoritatively represent their respective domains. Representatives from all relevant communities of interest (COIs), at all levels of government, can participate in NIEM.

Generally COIs are formally created through an organizational charter, memoranda of understanding (MOU), articles of incorporation, or the Federal Advisory Committee Act (FACA). COIs comprise practitioners and technical representatives who collectively have a stake in NIEM information exchanges.

A COI may have an interest in one or more domains, because domains can overlap. COIs can reuse data components and IEPDs from any domain and can offer content into various domains. Additionally, multiple COIs can coordinate to develop new domain content.

COIs typically meet, either personally or virtually, to articulate and define their business requirements and to plan, map and model their inter- and intra-domain information sharing requirements.

### **What is a data component?**

The fundamental building block of NIEM is a *data component*. Data components are the basic business data items that describe common concepts used in general business activities.

Information that is exchanged between organizations can be broken down into individual components—for example, information about people, places, material things, and events. *Universal Components* are those data components within an information exchange that are commonly shared and understood among all domains (e.g., person, address and organization).

Each domain can extend universal for its own use, and person may have different attributes within other domains. In the example below, the person component used in universal, identified as U:Person, is extended by addition of other components in the justice domain forming J:Person, and J:Person may similarly be extended to IM:Person for use in immigration exchanges.

### **[NIEM COMPONENT REUSE GRAPHIC]**

Components used in exchanges between multiple domains, but not universally shared, are *Common Components* (e.g., offense, sentence, and disposition). Components managed by a specific [community of interest](#) are considered [domain-specific](#).

### **What is an IEPD?**

An Information Exchange Package Documentation, or IEPD, is a specification for a data exchange and defines a particular data exchange. It is a set of artifacts consisting of normative exchange specifications, examples, metadata, and documentation encapsulated by a catalog that describes each artifact. The entire package is archived as a single compressed file. When uncompressed, the catalog is a hyperlinked index into the IEPD and can be opened in a standard browser. The user may use the catalog to overview the IEPD contents or to open each individual artifact.

The artifacts in the NIEM IEPD specification are an extension of the work on IEPD guidelines done for the Global Justice XML Data Model, specifically [Information Exchange Package Documentation Guidelines](#).

### **How do I use NIEM to build IEPDs?**

NIEM is a mature, governed, proven model that includes a six-step lifecycle that enables information exchange interoperability.

#### **[IEPD life cycle graphic]**

1. *Conduct Business Analysis and Requirements Review:* This step defines the business requirements associated with an information exchange that uses NIEM. It incorporates scenario-based planning, which is the recommended methodology for elaborating the business context of events, incidents or circumstances in which information exchange takes place.
2. *Complete Information Exchange Mapping and Data Modeling:* In this step, established methodologies are used to map and model operational information exchanges. This step also describes the process a **community of interest (COI)** follows to map their data sources to NIEM and identify IEPDs available for reuse and/or gaps between its data source and NIEM. The COIs can use the NIEM repository to search and discover existing **data components** to decrease the time needed to construct their IEPDs.
3. *Build and Validate IEPDs:* This step addresses the importance of using common documentation standards, such as IEPDs, to ensure there is consistency in the way information is captured, stored and exchanged, and that uniform methodologies exist to support the generation of the IEPDs. Once the COI validates its IEPD, it may submit the IEPD to its domain-specific area (proceed to step 5) or nominate data components for inclusion into Common (proceed to step 4).
4. *Data Harmonization and Promotion:* The appropriate NIEM governance stakeholders form a team to review an IEPD submission and determine whether any of the data components should be included in Common. The team evaluates the submission and makes a recommendation regarding which, why, how and when to integrate the proposed changes into NIEM.
5. *Publish and Implement IEPDs:* Once an IEPD is approved, it is stored in the NIEM repository. Other stakeholders or COIs can then search and discover published IEPDs for reuse or extend for a specific instance of the information exchange.
6. *Garner Feedback and Enhance and Expand IEPDs:* This step describes how the COIs work with the NIEM PMO to ensure existing IEPDs remain up to date and compliant with NIEM.

### **Can NIEM IEPDs be reused?**

Existing IEPDs, after publication, can be reused to create new IEPDs. This helps to decrease the time and costs associated with development time and increase consistency of data definitions.

#### **[NIEM REUSE MODEL GRAPHIC]**

- IEPD Repositories (DHA Data Architecture Repository (DAR), IEPD Clearinghouse, etc.) can be used to search and reuse existing IEPDs
- Artifacts within IEPDs can be leveraged to facilitate development and ease the burden on resources
- Elements in the NIEM data model can be reused within specific exchanges; domain governance efforts add new elements to the model

### **What resources are available to me as a NIEM user?**

NIEM is a comprehensive resource for organizations to successfully exchange information. NIEM provides tools, help, training, governance, and an active community of users.

#### **[FAQs CHART GRAPHIC]**