Military Operations (MilOps) Domain
Statement of Scope

Purpose:

The purpose of this MilOps Domain Scope Summary document is to:

(a) Describe the scope of the MilOps Domain, and
(b) Provide additional amplifying information to DOD organizations regarding NIEM, specifically what NIEM adoption and participation in the MilOps Domain may mean to them.

This MilOps Domain Scope Summary was developed to provide amplifying information for DOD. This information is being provided to address questions raised by DoD organizations who have reviewed early drafts of the required NIEM PMO documents. There are several documents which are required by the NIEM PMO to establish a new NIEM domain. These include the MilOps Domain Charter and MilOps Domain Operations and Maintenance Plan. The level of detail captured in these documents is driven by a NIEM PMO template and NIEM community audience. These prescribed templates do not identify how individual DOD organizations will be designated to participate, how they will coordinate any requirements or concerns, and how this participation may be related to existing DOD governance processes and forums.

Specifics for internal DOD coordination and vetting will not be captured in these NIEM PMO documents. DOD specific processes and procedures for vetting and approving any DOD positions to a NIEM domain or board will leverage existing DOD governance forums, such as the C4/Cyber FCB or Defense Acquisition Board (DAB). The emerging DOD CIO Governance Framework will also provide a structure within DOD for review and vetting of requested extensions to the NIEM domains, as well as overseeing the DOD participation and interaction with the NIEM domains and NIEM PMO.

There is no intention to publish this MilOps Domain Scope Summary document – it is to provide context for the MilOps team membership. Instead, the information provided below will be codified in various DOD CIO policy and guidance documents.

NIEM MilOps Domain Scope Statement

1. The NIEM MilOps domain manages those unique military operations and missions data components used to define NIEM Information Exchange Package Documents (IEPDs) that satisfies mission critical information sharing requirements within DOD, and/or with other Federal government agencies, and Mission Partners.

   a. The MilOps domain follows the NIEM governance construct: a domain steward, a domain steward agreement, and a domain charter. The domain's data components are managed by the domain steward through a fair and open process.
   b. The MilOps domain is sponsored by the DOD, but it is not a "DOD-unique" organization. It is part of NIEM, with participants from the Federal, state, local, tribal and international organizations as well as within DOD.

c. The MilOps domain is not a rebranding of existing standards. It is not a model repository. It is not a universal solution to all military-related information data needs. It is not a security cross-domain solution.

d. The domain's data components are available for reuse by information exchange designers. The domain steward does not control or approve that reuse.

2. In general, the domain's data components will be used to support information exchange requirements from the following DOD functional categories[1]:

a. Force Support: maintenance and management of a mission ready force

b. Battle Space Awareness: dispositions and intentions as well as the characteristics and conditions of the operational environment that bear on national and military decision-making

c. Force Application: maneuver and engagement in all environments to create the effects necessary to achieve mission objectives

d. Logistics: provides support for the projection and sustainment a logistically ready force

e. Command, Control, Communications, and Computers: authority and direction over forces and resources

f. Protection: prevention / mitigation of adverse effects of attacks on personnel and physical assets

3. Changes to the domain's data components are requested by the domain stakeholders and approved through the domain management process.

a. Content will not be added when the business need and reuse can be satisfied by data components in NIEM Core or in other NIEM domains.

b. New content will be harmonized with NIEM Core and with the other NIEM domains.

c. New content will be added upon approval by the NIEM MilOps Domain stakeholders.

4. The data components managed by the NIEM MilOps Domain are not intended to provide comprehensive coverage of the functional categories. Instead, the content contained will be primarily based upon the need for reuse among information exchange developers and users.

5. The MilOps domain does not approve or contain IEPDs. IEPD designers who reuse MilOps domain data components may participate in the MilOps domain, but are not required to do so. IEPDs are approved by cooperating program developers or by a standards organization.

[1] These are paraphrased definitions for the non-military reader. For the military canonical definitions and a breakout of specified sub-categories please see www.dtic.mil/futurejointwarfare/cap_areas.htm.

Amplifying Information for DOD Organizations[2]

I. *Background*

- The MilOps Domain was created as part of a larger DOD participation in the NIEM standards-based framework.
- It supports the Department of Defense (DOD) Chief Information Officer (CIO) Memorandum, "Adoption of the National Information Exchange Model with the Department of Defense," 28 March 2013, which states the intent for DOD to increase use of NIEM as the best suited option for standards-based data exchanges. It further states:
  - DOD organizations shall first consider NIEM for their information sharing solutions when deciding which data exchange standards or specifications meet their mission and operational needs.
  - In situations where NIEM may not be the best choice for building an information exchange service, Program Managers can apply for an 'exception to policy' wherein non-NIEM conforming information exchanges are used.
- The DOD has participated in NIEM as sponsor of the Maritime Domain, and as a member of the CBRN, Intelligence, Cyber, Biometric, and Health domains.

II. *NIEM Facts*

- NIEM has been implemented on a government-wide basis and across many Federal, State, local, tribal and international organizations. NIEM uses a federated structure composed of a small governance core that supports functional information exchanges that are organized into NIEM domains.
- NIEM provides a standardized approach for creating XML-based information exchanges that are specified in Information Exchange Package Documents (IEPDs). IEPDs are reusable artifacts available for search, discovery and re-use through the NIEM IEPD Clearinghouse.
- A key function of NIEM domains is to provide a venue to their COI for the creation of information exchanges. To execute that role, the domains may perform some or all of the functions below:
  - Build and maintain content tailored for their particular domain COI mission or function
  - Facilitate development of IEPDs and creation of conforming Information Exchange Packages (IEPs)
  - Ensure domain content conformance to NIEM Naming and Design rules (NDR)
  - Perform cross-domain harmonization of content
  - Reconcile differences in domain content with NIEM core
- NIEM Core content must be unclassified and publicly accessible. The community is open to any interested entity seeking information exchange solutions and willing to use NIEM naming and design rules.

[2] The information in the remaining sections of this document are consistent with the DOD CIO NIEM implementation plans and emerging policy guidance.

- NIEM is not a data standard. NIEM is a standardized approach to create information exchanges. Under certain circumstances, a NIEM-based exchange specification can become a data standard if so designated by a standards-developing organization.

III. DOD Engagement with NIEM

- DOD use of NIEM is expected to result in improved information sharing to include:
  - Intra-DOD data and information sharing conducted for joint command and control of national security missions;
  - DOD's interagency information sharing ability and support to the national emergency response system during disaster / catastrophic events;
  - Further alignment of XML data standards within DOD, aimed at improving the visibility, understandability, accessibility, trust and interoperability of shared data; and,
  - Further development of information exchange development tools as a reusable resource within DOD.
- The MilOps domain is sponsored by the DOD, but it is not a "DOD-unique" organization. It is a part of the larger NIEM community. Non-DOD organizations will be MilOps Domain participants.
- DOD governance of NIEM adoption is focused on ensuring consistency of engagement across the DOD and managing the demand load on the NIEM support structure. For most organizations, their adoption of NIEM will only require their developers to check the NIEM IEPD Clearinghouse and reuse data elements already defined.
- To minimize any divergent or contradictory DOD positions introduced into the NIEM domains, established DOD CIO governance forums will be used to achieve a coordinated DOD position. Most DOD organizations will engage only in the DOD's governance forums. Engagement in NIEM governance forums, especially the NBAC and NIEM Domain management teams will be limited to a select number of DOD organizations.
- There remains an important role for DOD's internal Communities of Interest (COIs) as DOD adopts the NIEM standards-based framework approach and implements the NIEM First policy. Some DOD COIs may become participants in several NIEM Domains, depending on the scope of their COI.
- Using the NIEM approach does not require any changes to existing data residing in repositories, data stores, or data bases. DOD uses NIEM as a standards-based framework approach to create information exchanges, not as a standardization process to produce new data standards.
- In general, the domain's data components will be used to support information exchange requirements from Warfighter Mission Area (WMA) Joint Capabilities Areas (JCAs):
  - JCA 1.0: Force Support
  - JCA 2.0: Battle Space Awareness
  - JCA 3.0: Force Application
  - JCA 4.0: Logistics
  - JCA 5.0: Command, Control, Communications, and Computers

  - JCA 7.0: Protection

- There is not a strict one-to-one alignment of data elements from the Warfighter Mission Area JCAs and the MilOps Domain. For example, there may be data elements which would fall logically in the JCA Battle Space Awareness, but for NIEM are better addressed by the NIEM Intelligence Domain. Another example would be data elements logically aligned to the Logistics JCA. Rather than MilOps Domain, the emerging NIEM Government Resources Management (GRM) may be the better NIEM domain for these elements to be included.
- Prospective users of NIEM are able to begin the development of new information exchanges by re-using any established data engineering resources previously published in the NIEM IEPD Clearinghouse (if unclassified) or in the DOD Data Services Environment (if restricted).
- Using NIEM to create a NIEM-conformant IES does not require becoming a participant in a NIEM Domain. Organizations can build NIEM conformant exchanges and not participate in any NIEM domain.
- DOD organizations who create a NIEM conformant exchange should register the IEPD in the NIEM IEPD Clearinghouse.
  - Also, in accordance with DODI 8320.02 [i], IEPDs created by DOD designers are published in the Data Services Environment (DSE).
  - If the IEPD is restricted (i.e., not openly accessible to all users of the NIEM Clearinghouse) a citation will be included in the NIEM Clearinghouse which states where/how authorized users can gain access.

[i] Enclosure 3, Para 1d, DODI 8320.02 “Data standards and specifications that require associated semantic and structural metadata, including vocabularies, taxonomies, and ontologies, will be published in the DSE, or in a registry that is federated with the DSE.”