National Information Exchange Model (NIEM)

Military Operations Domain Charter

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Table of Contents

1. References

This compilation of documents is the basis for DOD's establishment of the MilOps Domain and provides additional key information regarding NIEM.

a. DOD CIO memo "Adoption of the National Information Exchange Model with the Department of Defense", 28 March 2013

b. Office of Management and Budget, Digital Government: Building a 21st Century Platform to Better Serve the American People (May 23, 12012), available at http://www.whitehouse.gov/sites/default/files/omb/egov/digital-government/digital-government-strategy.pdf.

c. Presidential Memo M-13-13, May 9 2013, Open Data Policy-Managing Information as an Asset.

d. DODI 8320.02, Implementing the Sharing of Data, Information, and Information Technology (IT) Services in the Department of Defense, 5 August 2013.

e. DOD Information Enterprise Architecture (DOD IEA), Version 2.0, 10 August 2012.

f. Establishing Domain Governance: Making Self-Service a Reality, NIEM Business Architecture Committee (NBAC), February 2009, v1.0.

g. NIEM High-Level Version Architecture, NIEM Technical Architecture Committee (NTAC), 31 July 2008, v.1.0, available from http://hsxml.nhsdc.org/files/niem-version-architecture.

h. National Information Exchange Model (NIEM) Naming and Design Rules, NTAC, 31 October 2008, v.1.3, available from https://www.niem.gov/documentsdb/Documents/Technical/NIEM-NDR-1-3.pdf.

2. Introduction

In reference (a), The Department of Defense Chief Information Officer (DOD CIO) identified the National Information Exchange Model (NIEM) as the best suited standards-based approach for enhancing the interoperability and standardization of DOD information exchange content. NIEM offers a proven approach for developing standardized, reusable information exchange packages and has been adopted across international, federal, state, local, and tribal agencies. As one part of the overall DOD NIEM adoption, the DOD CIO requested the Joint Staff J6 become the Domain Steward for the Military Operations (MilOps) Domain.

A NIEM domain is an aggregation of stakeholders into a community of interest (COI) that are aligned to the domain's mission space by affiliation, mission, or function. The MilOps Domain is an operational mission focused venue designed to provide multi-functional, cross-organizational data elements that DOD and non-DOD information exchange developers may use in creating NIEM-based information exchanges.

2.1 Document Scope

This Charter describes the purpose, scope, goals, governance structure, and roles/responsibilities of the MilOps Domain. This Charter is supplemented by the MilOps Domain Operations and Maintenance Plan.

2.2 National Information Exchange Model (NIEM) Background

NIEM is a community-driven, government-wide, standards-based approach to exchanging information. The model was originally designed to develop, disseminate and support enterprise-wide information exchange standards and processes to enable cross-jurisdictional information sharing in emergency situations, as well as support the day-to-day operations of agencies nationwide. NIEM has grown into a working and collaborative partnership among governmental agencies, operational practitioners, systems developers, standards bodies, and other stakeholders at all levels of government. Used in all 50 states and internationally, it includes a data model, governance, training, tools, technical support services, and an active community to assist users in adopting a standards-based approach to exchanging data.

NIEM uses the Extensible Markup Language (XML) standard as a foundation to enable improved information sharing. The NIEM data model consists of two sets of closely related vocabularies: *NIEM Core* and individual *NIEM Domains*. NIEM Core represents elements commonly understood across all NIEM domains, and is updated and collaboratively maintained by the NIEM Business Architecture Committee (NBAC). The individual NIEM domains contain mission-specific elements that build upon NIEM Core concepts, and are managed through independent stewards.

DOD participation in NIEM complies with reference (b) Office of Management and Budget guidance for U.S. government departments and agencies to merge information exchange standards and build common-sense exchanges that sustain multiple, future information enterprise development and applications. Adoption of NIEM offers potential efficiencies and streamlined governance in delivering improved information sharing across the DOD and with DOD's mission partners.

3. Authority

In reference (a), the DOD CIO announced the intent for DOD-wide adoption of NIEM and the establishment of a MilOps Domain. Of note, the DOD CIO also specifies that DOD organizations shall first consider NIEM for their information sharing solutions when deciding upon data exchange standards or specifications.

4. Military Operations Domain Overview

4.1 Domain Purpose

The purpose of the MilOps Domain is to provide and maintain 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. Specific areas of projected improvement include:

a. Intra-DOD data and information sharing conducted for national security missions;
b. DOD's interagency information sharing ability and support to the national emergency response system during disaster / catastrophic events;
c. Further alignment of Extensible Markup Language (XML) data standards within DOD, aimed at improving the visibility, understandability, accessibility, trust and interoperability of shared data; and,
d. Further development of information exchange development tools as a reusable resource within DOD.

4.2 Domain Scope

The NIEM MilOps domain manages those unique military operations and mission 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.
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.

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: support needed for the projection and sustainment a logistically ready force
e. Command, Control, Communications, and Computers: authority and direction over forces and resources

[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.

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

Changes to the domain's data components are requested by the domain stakeholders and approved through the domain management process. 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. New content will be harmonized with NIEM Core and with the other NIEM domains. New content will be added upon approval by the NIEM MilOps Domain stakeholders.

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.

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.

5. Governance

The NIEM governance, in which the DOD CIO participates on behalf of DOD, uses a federated model, headed by an Executive Steering Council (ESC) that sets the overall vision for the NIEM community and serves as the decision-making body regarding NIEM membership, funding requirements, and program / technical direction. Day-to-day operations are managed by the NIEM Program Management Office (NIEM PMO), which facilitates collaboration between NIEM community and stakeholders in developing NIEM-based information exchange solutions. The NIEM Business Architecture Committee (NBAC) guides the development, harmonization, evolution, and implementation of NIEM Core data components, as well as governs the processes for participating in NIEM domains. The NIEM Technical Architecture Committee (NTAC) is responsible for defining the technical architecture that governs NIEM. The DOD CIO appoints the Domain Stewards for DOD-sponsored domains. The stewards, or their designated representative, participate in the NBAC.

The NIEM governance structure is executed through a consensus-based approach and is depicted in Figure 1. Detailed descriptions of the specific functions of each entity in the NIEM governance structure are posted at the NIEM web site (https://www.niem.gov/Pages/default.aspx).

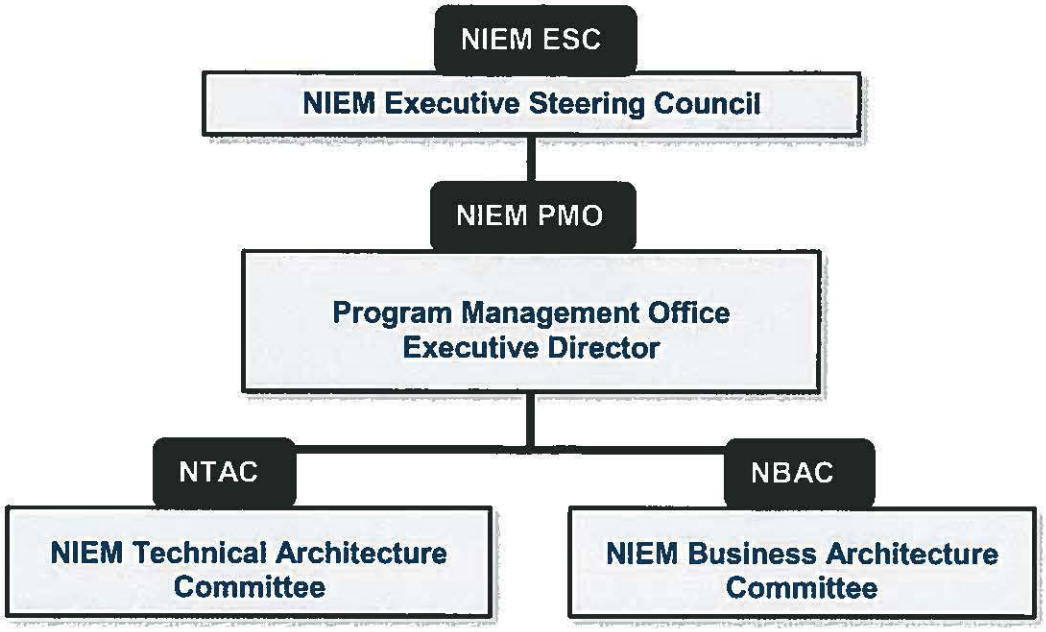

Figure 1: NIEM Governance Structure

5.1 MilOps Domain Governance Structure

The MilOps Domain conforms to the NIEM governance construct, with a Domain Steward and supporting working groups to manage Domain activities, produce Domain core content, and facilitate production of information exchange package documents (IEPDs). This structure enables effective management of Domain activities, facilitation of engagement with Domain participants, oversight of the development of information exchange tools, and prioritization of work.

The MilOps Domain governance structure is depicted in Figure 2.

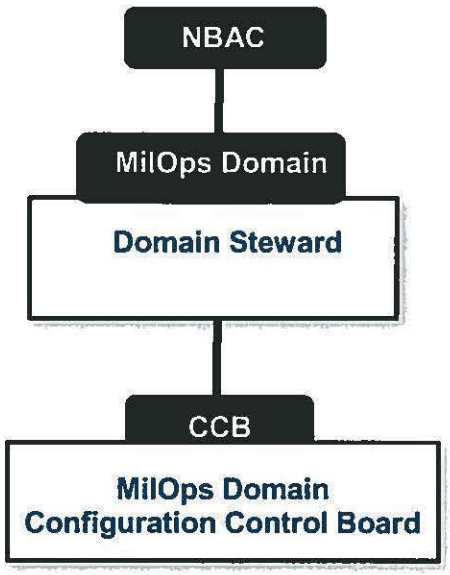

Figure 2: MilOps Domain Governance Structure

5.1.1 MilOps Domain Steward

The Domain Steward is the person and organization approved by the DOD CIO and designated in the Domain Stewardship Agreement who provides oversight of the MilOps Domain consistent with NIEM PMO and DOD guidance. For a complete listing of responsibilities, see Table 1.

5.1.2 MilOps Domain Configuration Control Board (MD CCB)

The MD CCB performs working-level coordination of issues to achieve NIEM program and Departmental objectives, and chaired by a Domain Steward designated senior (GS-15 / equivalent). The MD CCB oversees the production of Domain content. The CCB will follow the NIEM consensus-based approach for deciding domain content issues. Non-DOD organizations are specifically desired and encouraged to directly participate in the MD CCB.

The CCB will also assist on a case-by-case basis implementers with validation work, and will provide business and technical expertise regarding use of the MilOps Domain content and creation of Information Exchange Package Documentations (IEPDs). It also provides the repository and training functions for domain related artifacts, tools and documentation. The MD CCB is empowered to form sub-working groups to meet long-term coordination needs.

The CCB members will be representatives from those organizations that have adopted and implemented MilOps NIEM data components to share information or plan to in the near future. Representatives should be formally designated by their organization to represent concerns and communicate between the MilOps Domain steward and their organization. The CCB will meet via conference call on a periodic schedule, with a possible annual face-to-face session. Meetings will be open to all NIEM community participants. Any CCB Board's secretariat needs will be provided by the Domain Steward. All CCB decisions will be consensus-based, and if determined necessary, a designated CCB member can request a matter be submitted for formal vote by the CCB. CCB decisions are either implemented or provided to the MilOps Domain Steward as a recommendation or issue for review / approval / resolution at the NBAC.

5.1.3 Sub-Working Groups and Tiger Teams

Sub-Working Groups are established to perform complex, long-term tasks (greater than 4 months) requiring a focused effort with a dedicated group. These groups obtain their authority from their tasking authority (Domain Steward, CCB Chair); they self-direct coordination actions to meet tasking requirements; and they formally report results to the tasking authority. Tiger Teams are used as needed for short-term tasks 4 months or less), to meet emergent short-term tasking and obtain their authority from their tasking authority (CCB designated lead). Tiger Teams they self-direct coordination actions to meet tasking requirements; and they formally report results to the tasking authority.

5.2 Roles and Responsibilities

The roles and responsibilities of the MilOps Domain governance entities are as follows:

Organization	Roles	Responsibilities
MilOps Domain Configuration Control Board (MD CCB)	Performs day-to-day management functions and configuration management of content and promotes reuse of information exchange artifacts	1) Approves implementation of MilOps Domain content 2) Updates MilOps Domain artifacts (e.g., Charter, Operations &Maintenance Plan) 3) Provides a representative to the NIEM Business Architecture Committee (NBAC) on behalf of the Domain Steward 4) Integrates DOD priorities into MilOps Domain work plan 5) Represents the MilOps Domain to DOD acquisition and capability development processes 6) Initiates and maintains cross-NIEM community of domains harmonization activities 7) Reviews and recommends NIEM Core content change on behalf of Domain stakeholders 8) Provides regular updates to the Domain Steward on Domain activities 9) Promotes and maintains DOD participation in the MilOps Domain 10) Develops and presents MilOps Domain technical and business presentations 11) Participates, on behalf of Domain stakeholders, in NIEM events, training and initiatives 12) Establishes and oversees the performance of Sub-Working Groups and Tiger Teams as required 13) Creates and configuration manages the MilOps Domain public and restricted content 14) Facilitates use of domain content to support creation of stakeholder IEPDs 15) Tracks emerging NIEM technical issues and requirements to ensure timely resolution and conformance by Domain content 16) Promotes reuse and visibility of information exchange artifacts that leverage MilOps Domain content 17) Ensures Domain content is aligned with reference (g) NIEM High-Level Version Architecture and reference (h) NIEM Naming and Design Rules (NDR) and other documentation, as appropriate 18) Leverages DOD technical infrastructure for Domain technical development, testing, and content use 19) Maintains a DOD web presence for the MilOps Domain 20) Maintains the public MilOps Domain web presence on NIEM.gov site 21) Ensures adequacy of training resources for Domain Users 22) Facilitates development of Use Case analysis, scenario planning and requirements for Domain content addition

Table 1: MilOps Domain Roles and Responsibilities Listing

5.3 Governance Meetings and Reporting

The MilOps Domain mission execution requires regular meetings and reviews. Each entity (Domain Steward, MD CCB, Sub-Working Groups, Tiger Teams) will meet as required to achieve timely completion of their tasks and also to align with and support NIEM governance meetings. These meetings will be routinely conducted by conference call/DCO. The MD CCB will seek to conduct a face-to-face meeting annually, as appropriate. Meeting minutes will be provided to the Domain Steward for review.

The MilOps Domain structure is designed to optimize collaboration and flexibility. As the senior group, the MD CCB is the primary conduit for communications to the Domain Steward and NIEM PMO.

5.4 Relationships and Dependencies

The MD CCB Chair will maintain close communications with the Domain Steward, other NIEM governance bodies and the NIEM PMO. The MD CCB also serves as a technical expert forum for discovery and resolution of technical matters, and approves changes to existing or additions to the MilOps domain content. While not all-inclusive, the following interactions exemplify collaboration between organizations:

- The Domain Steward monitors activities of the MD CCB, and coordinates with all participants and stakeholders the accomplishment of NIEM PMO / DOD objectives in the MilOps Domain.
- The MD CCB will collaborate with the NIEM PMO, NBAC, NTAC, and domain stakeholders for resolution of issues impacting the use of the MilOps Domain.
- The MD CCB collaborates with representatives to develop, refine, approve and implement content.
- The NBAC provides feedback via the designated MilOps Domain NBAC representative of any updates or changes to the submitted content for the purpose of mutual resolution and harmonization.

6. MilOps Domain Operations and Communication

Day-to-day processes and configuration management processes of the MilOps Domain are described in the MilOps Domain Operations and Maintenance Plan. The MilOps Domain structure and processes will be adapted to meet priorities from the MilOps Domain Steward and the NIEM PMO.

7. Domain Metrics

The MD CCB will track relevant metrics to evaluate the performance of the MilOps Domain and its processes. These metrics include:

- The number of stakeholders or organizations who are participating in the MilOps Domain CCB.
- The number of content change requests adjudicated within the MilOps Domain.
- The number of training sessions
- The number of outreach session

- The number of IEPDs created that leverage MilOps Domain content.

8. Acronyms and Abbreviations

CC/S/A	Combatant Commands/Services/Agencies
CIO	Chief Information Officer
COI	Community of Interest
DOD	Department of Defense
IEPD	Information Exchange Package Documentation
MD CCB	MilOps Domain Configuration Control Board
MilOps	Military Operations
NBAC	NIEM Business Architecture Committee
NDR	Naming and Design Rules
NIEM	National Information Exchange Model
NIEM PMO	NIEM Program Management Office
NTAC	NIEM Technical Architecture Committee
XML	Extensible Markup Language

9. Approval

Stuart A. Whitehead Date: 18 Dec '13

Stuart A. Whitehead

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