

# **ENGINEERING & CONSTRUCTION Bulletin**

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Type: Policy

**Subject:** NAVFAC's Building Information Management / Modeling (BIM) Phased Implementation Plan to Acquire Facility Electronic Operation and Maintenance Support Information (eOMSI)

## **References:**

- (a) Unified Facilities Guide Specifications (UFGS) Section 01 78 24.00 20 Facility Electronic Operation and Maintenance Support Information (eOMSI)
- (b) Unified Facilities Guide Specifications (UFGS) Section 01 78 23 Operation and Maintenance (O&M) Data
- (c) eOMSI Facility Data Workbook (FDW)
- (d) Facilities Criteria (FC) 1-300-09N Navy and Marine Corps Design Procedures
- (e) BIM Project Execution Plan (PxP)

## **1. Purpose**

Provide overall NAVFAC policy and guidance on implementation of BIM and eOMSI deliverables, roles, and responsibilities.

The NAVFAC BIM / eOMSI Program can be found at the Whole Building Design Guide website ([http://www.wbdg.org/bim/navfac\\_bim.php](http://www.wbdg.org/bim/navfac_bim.php)) hosted by the National Institute of Building Sciences (NIBS). Please review this page for periodic updates.

## **2. Background**

NAVFAC reviewed processes and data systems which produced a facility life cycle data map to understand whether BIM technology is a cost effective process. After executing in-house BIM Pilot Projects and coordinating with Public Works (PW) Business Line regarding their facility maintenance database (MAXIMO), NAVFAC generated this ECB to implement BIM in support of design, construction, and maintenance (eOMSI).

## **3. Definitions**

Reference (a) eOMSI Specification - Specifies project electronic operation and maintenance support information deliverables; and consists of two parts.

- 1) eOMSI Manuals:
  - a) Product and Drawing Information Manual - Contains operation and maintenance (O&M) data, record drawings, and utility record drawings
  - b) Facility Information Manual - Contains general facility and system description, floor plans, interior finishes, schedules (plumbing, lighting, and windows)
- 2) eOMSI Facility Data Workbook (FDW)

Reference (b) Operation and Maintenance (O&M) Data Specification - Contains O&M data to include operating instructions, preventive maintenance, and repair information; located in the eOMSI Product and Drawing Information Manual.

Reference (c) eOMSI Facility Data Workbook (FDW) - Is an Excel spreadsheet which the Construction Contractor populates as facility systems, subsystems, and equipment are installed; upon project completion the final FDW is a contract deliverable provided to the Government for upload into MAXIMO to support sustainment, restoration and modernization of the facility.

Reference (d) Navy and Marine Corps Design Procedures - Contains Building Information Modeling (BIM) requirements. It includes definitions, minimum modeling, facility data requirements, submittals, and reviews the Designer of Record (DOR) must follow when executing BIM to acquire eOMSI data for Design Build projects.

Reference (e) BIM Project Execution Plan (PxP) - Is a plan the Designer of Record (DOR) prepares for Government approval that explains in detail quality control reviews, software application version, model organization, team members by discipline, and project deliverables when using a 3D parametric application (BIM) for Design Build projects.

#### 4. Applicability

Effective immediately this ECB applies to projects at Navy Installations, Joint Bases, Department of Defense (DoD) Agencies, or Field Activities where NAVFAC PW is the maintenance provider of the facility that meet the following: For New Construction projects greater than or equal to \$1M, or for Major Renovation projects greater than or equal to 50% of the Plant Replacement Value (PRV). For Major Renovation projects the Project Manager (PM) must coordinate with PW Facilities Management Division (FMD) at project initiation to review if scope is sufficiently complex to implement eOMSI, regardless of dollar threshold. For example:

- 1) A \$4M roof replacement will meet the major renovation dollar threshold limit; however the eOMSI facility data generated for MAXIMO will be minimal and thus does not merit implementing eOMSI.
- 2) Conversely, a \$2.5M multi-system building upgrade may not meet the major renovation dollar threshold but will generate considerable eOMSI facility data for MAXIMO and therefore eOMSI should be implemented.

#### 5. Policy


The policy is:

- 1) NAVFAC is software neutral and does not specify a standard application to execute BIM
- 2) Design-Build (DB) and A/E Design-Bid-Build (DBB) projects, must incorporate references (a) through (e); eOMSI and BIM are required.
- 3) In-House Design (IHD) teams must incorporate references (a) through (c); eOMSI is required.

- 4) In-House DBB teams are presently not required to use BIM due to limited network capacity and capability.

**6. Point of Contact**

The HQ point of contact for this ECB is Ms. Kathryn H. Allison, P.E. NAVFAC HQ CI, Chief Engineer's Office, (843) 794-4243.



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