

**SECTION 11 FLEET MODERNIZATION PROGRAM MANAGEMENT
INFORMATION SYSTEM (FMPMIS) AND NAVY DATA
ENVIRONMENT-NAVY MODERNIZATION (NDE-NM) SYSTEM
TABLE OF CONTENTS**

SUBSECTION 11-1 INTRODUCTION TO FMPNIS AND NDE-NM

- 11-1.1 Scope
- 11-1.2 References
- 11-1.3 Background
- 11-1.4 Policy Linking FMP, FMPMIS and NDE-NM
- 11-1.5 Responsibilities of FMPMIS Program Office

SUBSECTION 11-2 SUBSYSTEMS

- 11-2.1 Background
- 11-2.2 NDE-NM Logistics Application
- 11-2.3 Legacy FMPMIS Program Module
- 11-2.4 Legacy FMPMIS Execution Module
- 11-2.5 NDE-NM AIPS
- 11-2.6 NDE SPAWAR Integrated Data Environment (NDE-SIDE)
- 11-2.7 Type Commander (TYCOM) Alteration Management System (TAMS)
- 11-2.8 Life Cycle Requirement System-Fleet Modernization Program (LCRS-FMP)
- 11-2.9 Afloat Master Planning System (AMPS)
- 11-2.10 Configuration Data Managers Database-Open Architecture (CDMD-OA)
- 11-2.11 Legacy FMPMIS and NDE-NM Responsibilities

TABLES

- S11-1 Legacy FMPMIS and NDE-NM Data Authority

SUBSECTION 11-1 INTRODUCTION TO FMPMIS AND NDE-NM

11-1.1 Scope

This section of the Fleet Modernization Program (FMP) Management and Operations Manual addresses the Fleet Modernization Program Management Information System (FMPMIS) and the Navy Data Environment-Navy Modernization System (NDE-NM). FMPMIS was established under the direction of the Chief of Naval Operations (CNO) N43 in coordination with the Fleet Commanders in Chief (FLTCINCs) and was designated by reference S11(a) as the official Automated Information System (AIS) supporting the FMP. NDE-NM was designed as an enterprise data model to integrate and merge existing modernization, maintenance, and logistics legacy data structures into a single design. The objective of NDE-NM is to consolidate Fleet Modernization Business Processes and legacy Data Systems. The following applications are being merged into the NDE-NM common model: FMPMIS (Logistics Module), and Alteration Installation Planning System (AIPS). The following systems will replicate data and interface with NDE-NM to share alteration, scheduling, material, and financial data: NDE-SPAWAR Integrated Data Environment (NDE-SIDE), FMPMIS (Program and Execution Modules), Type Commander (TYCOM) Alteration Management System (TAMS), Life Cycle Requirement System-Fleet Modernization Program (LCRS-FMP), Configuration Data Managers Database-Open Architecture (CDMD-OA), and Afloat Master Planning System (AMPS).

The FMPMIS and NDE-NM databases contain data relative to all alterations, including ship overhaul schedules, material, Integrated Logistics Support (ILS) requirements and design support requirements, and related financial data. FMPMIS and NDE-NM is sponsored by CNO (N43) and managed by the Naval Sea Systems Command (NAVSEA) FMPMIS Program Office (NAVSEA 04M3).

11-1.2 References

S11(a) OPNAVINST 4720.2, Series, Subj: Fleet Modernization Program (FMP) Policy
S11(b) FMPMIS Program Office Standard Operating Procedures

11-1.3 Background

The purpose of the FMPMIS is to provide an automated, integrated information support system to enhance the decision-making capabilities of FMP managers. The primary objective of FMPMIS is to provide timely information to the FMP community that supports planning, programming, budgeting, management, and execution of the FMP. FMPMIS has, for over 15 years, been the official automated system providing this information for FMP managers throughout the Navy. Major users of FMPMIS are CNO, FLTCINCs and TYCOMs, Hardware Systems Commands (HSCs), Material Managers, Design Agents (Das), Planning Yards (PYs), Ship Program Managers (SPMs), Program Managers (PMs), ILS Managers, In-service Engineering Agents (ISEAs), Life Cycle Managers (LCMs) and Industrial Activities.

The purpose of NDE-NM is to provide a web enabled enterprise data model to integrate and merge existing modernization, maintenance, and logistics legacy data structures into a single design to enhance the decision-making capabilities of FMP managers. The primary objective of NDE-NM is to consolidate Fleet Modernization Business Processes and Data Systems into a single architecture to provide timely information to the FMP community that supports planning,

programming, budgeting, management, and execution of the FMP.

The NDE-NM environment consists of client and web applications, business objects, and an enterprise data model that support those applications.

11-1.4 Policy Linking FMP, FMPMIS, and NDE-NM

The SHIPALT development process of the FMP is closely linked to selected support capabilities of FMPMIS and NDE-NM. As a result, certain major FMP activities are keyed to FMPMIS and NDE-NM as a matter of policy. For example:

- Identification of a SHIPALT number in the Amalgamated Military and Technical Improvement Plan (AMT) constitutes authority to expend resources to develop the Ship Alteration Record (SAR).
- The programming of a SHIPALT in FMPMIS (Program Module) constitutes authority for material managers to initiate material procurement in support of that SHIPALT. It further allows the SPM to provide funds to the PY to prepare SHIPALT Installation Drawings (SIDs) for the Title “K” and “K-P” SHIPALTs.
- SHIPALTs are considered "programmed" in FMPMIS (Program Module) when they are scheduled for accomplishment on a specific hull during a designated availability.
- NDE-NM (formerly FMPMIS Logistics Module) is the official information base for FMP management.
- NDE-NM Logistics Application (formerly FMPMIS Logistics Module) is the single official source for FMP material management data.
- FMPMIS (Program Module) indicates which SHIPALTs are budgeted.
- FMPMIS (Execution Module) indicates which funding document funded the SHIPALT installation cost.

11-1.5 Responsibilities of Legacy FMPMIS Program Office

NAVSEA 04M is responsible for the operation and maintenance of the production FMPMIS Automated Data Processing (ADP) system and NDE-NM as documented in reference S11(b).

Other responsibilities of the FMPMIS Program Office include:

- Functioning as Program Manager for legacy FMPMIS and NDE-NM.
- Manage design and control of automated interfaces between legacy FMPMIS, NDE-NM and other information systems.
- Acting as the NAVSEA point of contact for users requesting legacy FMPMIS and NDE-NM products/services.

SUBSECTION 11-2 SUBSYSTEMS

11-2.1 Background

Legacy FMPMIS consists of three subsystem modules tied together into one federated system with the Logistics module being the key subsystem. Legacy FMPMIS has combined the three separate functions, Logistics, Program, and Execution into one Graphical User Interface (GUI) client/server system built on a single unified database. Substantial efficiencies and increased effectiveness have been realized through combining the three databases and upgrading the management tools to better meet the information requirements of the US Navy. Legacy FMPMIS Logistics Module has been integrated into the NDE-NM enterprise data architecture to improve the coordination and visibility of FMP planning data. These functions and responsibilities are described in further detail in subsections 11-2.2, 11-2.3 and 11-2.4. As a result of US Navy reorganizations and changes that may be adopted in the legacy FMPMIS redesign, some or all the subsystems may be subsequently renamed, or absorbed into the redesigned database. These changes will not affect the basic policies that legacy FMPMIS is the official, authoritative repository for FMP planning information and that access to FMP data shall be exercised using approved and secure access methods or intersystem interfaces.

11-2.2 NDE-NM (Logistics application) (formerly FMPMIS Logistics Module)

NDE-NM Logistics Application is a tool that tracks and maintains logistical data for modernizing ships in the Navy. The purpose of NDE-NM Logistics Application is to store all the engineering information, materials, equipment and management support required to perform modernizations to the right place at the right time. This includes alteration information, automated tracking of materials usage and requirements, alterations scheduling and completion status and detailed shipyard scheduling.

11-2.3 Legacy FMPMIS Program Module

The Program module of legacy FMPMIS is a tool that produces detailed financial compilation data required for FMP budget submissions; provides automated program/fiscal scenarios used to adjust program budgets to remain within controls by utilizing current planning information incorporated in NDE-NM Logistics Application. The Program module allows planners to explore various combinations for assigning allocated funds, comparing projects for greatest overall effectiveness, and conducting “what-if” projections to balance identified needs. The programming of a SHIPALT in FMPMIS (Program Module) constitutes authority for material managers to initiate material procurement in support of that SHIPALT. It further allows the SPM to provide funds to the PY to prepare SHIPALT Installation Drawings (SIDs) for the Title “K” and “K-P” SHIPALTs.

11-2.4 Legacy FMPMIS Execution Module

The Execution module of legacy FMPMIS provides an electronic workflow environment that processes approximately 5000 funding documents each year. The module supports financial planning, funding document preparation, cash management, budget change and tracking, and reporting. It promotes the accuracy of funding by validating funding documents against remaining budget, and promotes the timeliness of funding for availabilities through the systematic production of the funding documents.

The Execution module is comprised of six major subsystems, which correspond to primary FMP budget execution functions.

- The Document subsystem supports the processing of the funding documents, and allows users to create, approve, and transmit funding documents.
- The Plan subsystem allows users to enter the Obligation Plan for the Fiscal Year (FY).
- The Cash subsystem supports the FMP offices entry of the cash (apportionment) received, and tracks financial status by automatically debiting/crediting the Chief of Naval Operations (OPNAV) Program Sponsor/SPM account when documents are issued.
- The Control subsystem supports the entry of budget control data.
- The Program subsystem allows users to enter current estimates for availabilities, and view the Shipsheet and Separate Funding Line (SFL) Summaries.
- The reports subsystem allows users to report information in the Execution module.

11-2.5 NDE-NM Alteration Installation Planning System (NDE-NM AIPS)

NDE-NM AIPS is a tool that provides consolidated planning data to install alterations by Alteration Installation Teams (AITs) typically outside CNO availabilities. It contains ordinance alteration (ORDALT), machine alteration (MACHALT), field changes (FC), engineering change (EC), and engineering change proposal (ECP) data. This system is used to support the TYCOM Quarterly Scheduling Conferences.

11-2.6 NDE SPAWAR Integrated Data Environment (NDE-SIDE)

NDE SPAWAR Integrated Data Environment (NDE-SIDE) is a tool that aligns and integrates SPAWAR and NAVSEA business processes, applications, and data. The goal is to enter the data once, store the data in a common environment, and use the data across applications. This promotes data convergence and assures data interoperability across processes and applications. It also allows the establishment of authoritative data sources and greater traceability of data for accuracy and quality, while providing for data deconfliction. NDE-SIDE provides this convergence through a shared data architecture that supports web-based applications and interfaces.

11-2.7 Type Commander (TYCOM) Alteration Management System (TAMS)

TAMS is an automated system operated by COMSUBLANT/COMSUBPAC that contains submarine specific maintenance and modernization information related to alteration completion status, authorization, scheduling, and designated accomplishing activity. It tracks all Alteration and Improvement (A&I) items, TRIDENT Alteration (TZ) Improvements, TEMPALTs/OPALTs and all SHIPALTs with the exception of Title K non-reactor plant SHIPALTs. TAMS is the instrument by which the TYCOM authorizes the accomplishment and completion status for all submarines.

11-2.8 Life Cycle Requirement System-Fleet Modernization Program (LCRS-FMP)

The LCRS-FMP system is a tool used to track and maintain Aircraft Carrier alteration scheduling and status information including NNPI/NOFORN data. This program tracks alteration installation schedules, cost estimates, estimate histories, installation histories, guidance data, and funding data.

11-2.9 Afloat Master Planning System (AMPS)

AMPS is a web-based, Program Manager-centric record of combat systems (CS) and command

control, communications, computers, surveillance and reconnaissance intelligence (C4ISR) systems and software present in and planned for installation aboard afloat units and connected shore elements affecting a BF. Its primary design is to support the FLTCINC D-30 process specified in the joint CINCPACFLT/CINCLANTFLT Instruction 4720.3A. AMPS is the FLTCINC's tool for displaying and controlling, through electronic change control, the systems and software that deploy with a Battle Force. AMPS includes traditional Navy (NAVSEA, NAVAIR & SPAWAR) shipboard systems, embarked airwing and aircraft systems, embarked USMC systems, and systems from other DoD origins. All systems are associated with owning commands, and the people in those commands. All data entries are date-time stamped and credited to the particular authorized people that made those entries. AMPS does not include all systems or subsystems, but only those that influence a warfighting capability of the ships, Battle Force Interoperability (BFI), or are of special Fleet interest.

11-2.10 Configuration Data Managers Database-Open Architecture (CDMD-OA)

Configuration Data Managers Database-Open Architecture (CDMD-OA) is the authoritative database for establishing, and maintaining Ships' configuration, alteration and logistics information by Unit Identification Code (UIC). CDMD-OA's primary objective is to identify actual ships' configuration, track alterations and logistics data, and to provide necessary support to the Fleet.

11-11 Legacy FMPMIS and NDE-NM Data Responsibilities

Legacy FMPMIS and NDE-NM data may be changed when authorized by the cognizant office as illustrated in Table S11-1 as an example.

TABLE S11-1
Legacy FMPMIS and NDE-NM DATA AUTHORITY

RESPONSIBLE OFFICE	TYPES OF DATA AUTHORIZED TO CHANGE
CNO (N43)	<ul style="list-style-type: none"> • Overhaul schedules (CNO Controlled) • Title “K” SHIPALT priorities • Title “K” SHIPALT programming • Installation funds for Title “K” and “K-P” SHIPALTs • Funds for the approved ORDALT Installation Plan • Manday rates as provided by NAVSEA 01 and 04X
TYCOMS (for assigned ships)	<ul style="list-style-type: none"> • Availability schedule (DRAV, FMAV, IMAV, PRV, RAV, TAV, TOA) • Title “D” and “F” SHIPALTs/AER priorities • Title “D” and “F” SHIPALT/AER programming • Installation funds for the Title “D” and “F” SHIPALTs/AERs • TYCOM SHIPALT completion status
SPMs (for cognizant ship classes)	<ul style="list-style-type: none"> • SHIPALT technical data • Installation requirements in mandays • Material requirements for SHIPALTs • SHIPALT/AER status • SHIPALT applicability to a ship • ILS requirements • SSR update requirements • Conjunctive and Concurrent SHIPALT requirements
MATERIAL MANAGERS (for assigned material)	<ul style="list-style-type: none"> • Material technical data • Material procurement cost • Projected material delivery date • MILSTRIP data • Procurement contract data • "Consisting of" data
INSTALLING ACTIVITY (for assigned availabilities)	<ul style="list-style-type: none"> • Cost to install SHIPALTs • Required material delivery date • Manday cost • Requisition Information
PLANNING YARD (for assigned hulls)	<ul style="list-style-type: none"> • SID availability