Acquisition Logistics Manual

NAVFACINST 4081.1A

Prepared by

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Enclosure (1)

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Chapter 2
Acquisition Logistics Overview

2.1 Introduction

The purpose of Acquisition Logistics is to ensure weapons systems are designed for supportability, and support elements are acquired and provided to the customer at the lowest life cycle cost. This document establishes procedures and guidelines to provide the warfighter with total life cycle support to meet dynamic missions, ensure logistics support is available at IOC, and provide operational support for the expeditionary forces. This instruction is not intended to replace or change policies and guidance provided by DoD and Secretary of the Navy (SECNAV) instructions for programs managed within the Defense Acquisition Management Framework. Rather, this policy statement is written to augment those documents. Expeditionary Acquisition Programs will strictly adhere to Naval and Department of Defense (DoD) Acquisition Policy for programs managed within the Defense Acquisition Management Framework. In instances where this instruction conflicts with Department of the Navy (DoN) and DoD policies and instructions, DoN and DoD policy and instructions will take precedence.

Additionally, this document aims to address the unique nature of expeditionary programs, provide guidance to integrate logistics products into the expeditionary logistics support infrastructure, and to facilitate seamless support for newly integrated capabilities. Due to the large volume of Abbreviated Acquisition Programs (AAP) for Commercial Off-The-Shelf (COTS) and Non-Developmental Item (NDI) equipment managed by NAVFAC, additional acquisition logistics guidelines for these program types are provided in Chapter 4. The short acquisition delivery timeframes associated with COTS and NDI AAPs present unique challenges to expeditionary acquisition managers. The guidelines provide the expeditionary acquisition logistics manager with a planning framework and processes to effectively manage COTS and NDI AAPs, which DoD and SECNAV Acquisition policies and instructions do not adequately address.

2.2 Background

The concepts of Life Cycle Logistics (LCL) have evolved from earlier elements of Integrated Logistics Support (ILS). Recent amplifications to DoD and SECNAV policy have changed the focus and terminology to emphasize the broader consideration of acquisition logistics. This ensures the early planning and implementation of life cycle support in the system acquisition process, influencing design and/or source selection criteria, improving readiness and supportability, and minimizing life cycle operation and support costs.

2.3 Total Life Cycle Systems Management (TLCSM)

The Defense Acquisition Guidebook designates Program Managers (PM) as the life cycle manager, providing them full responsibility for implementing TLCSM. TLCSM is the implementation, management, and oversight, by the designated Program Manager (PM), of all activities associated with the acquisition, development, production, fielding, sustainment, and disposal of a DoD weapon or materiel system across its life cycle. It includes but is not limited to the following:

- Single point of accountability for accomplishing program logistics objectives including sustainment;
- Evolutionary acquisition strategies, including product support;
- An emphasis on LCL in the systems engineering process;
- Sustainment as a key element of performance;
- Performance-Based Logistics (PBL) strategies
- Increased reliability and reduced logistics footprint;
- Continuing reviews of sustainment strategies, to include end-to-end materiel readiness value chain planning, assessment, and execution;
- Proactive consideration of Diminishing Manufacturing Sources and Materiel Shortages (DMSMS) / Obsolescence Issues
- Demilitarization and final disposition of the equipment.

2.4 Life Cycle Logistics

LCL is the planning, development, implementation, and management of a comprehensive, affordable, and effective systems support strategy. Under TLCSM, LCL has a principal role during the acquisition and operational phases of the weapon or materiel system life cycle. LCL can be divided into the two phases of Acquisition Logistics and Sustainment. The focus of this instruction is the Acquisition Logistics phase.

2.4.1 Acquisition Logistics

Acquisition Logistics, as applied throughout the acquisition process, is a multi-functional, technical management discipline associated with the design, development, test, production, fielding, sustainment, and improvement and/or modification of cost and/or effective systems that achieve the user's peacetime and wartime readiness requirements. The principal objectives of Acquisition Logistics are to ensure that support considerations are an integral part of the system's design and/or source selection requirements; that the system can be cost-effectively supported throughout the life cycle; and the infrastructure and integrated logistics support elements necessary for initial fielding and operational support of the system are identified, developed and acquired. The majority of a system's life cycle costs can be attributed directly to operations and support costs once the system is fielded, such as fuel consumption. Because these costs are largely determined early in the system development period, it is essential that system developers evaluate the potential impact to operations and support costs of alternative designs and factor these into early design/ acquisition decisions. Acquisition Logistics activities are most effective when they are integral to both the contractor's and Government's systems engineering technical and management processes. When this is the case, system designers, acquisition logisticians, and Program Managers (PMs) are best able to identify, consider, and trade-off support considerations with other system costs, schedule, and performance parameters to arrive at an optimum balance of system requirements that meet the users’ operational and readiness requirements. Acquisition logistics managers for COTS/ NDI AAPs should ensure that support considerations are documented in the solicitation and source selection documents to ensure that supportability objectives are key considerations early in the system acquisition process.

2.4.2 Integrated Logistics Support (ILS) Elements

As previously stated, one of the principal objectives of Acquisition Logistics is the identification, development and acquisition of the required ILS Elements that comprise the product support package of the weapon system. These elements and disciplines, depicted in Figure 2-1 below, are applied throughout the life cycle and are discussed in more detail in Chapter 5.

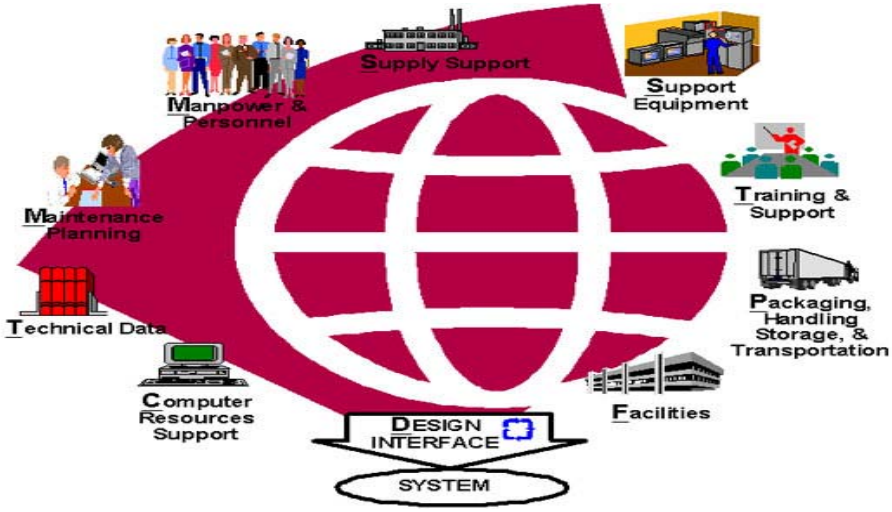

Figure 2-1 ILS Elements

2.4.3 User's Logistics Support Summary (ULSS)

The ULSS is used to document the logistics resources necessary to operate and maintain the system and its subsystems and equipments in their operational environment. It provides key logistics data, describes the support infrastructure, identifies the ILS elements that comprise the Product Support Package, and details the materiel fielding process. A ULSS template is provided in Appendix D.

Chapter 3
Responsibilities

3.1 OPNAV Resource Sponsors

The resource sponsor's role is to identify, program, and budget for expeditionary program requirements. They provide a key interface between the TYCOM's requirements; the Planning, Programming, Budgeting & Execution System (PPBES) process; and the Defense Acquisition System (DAS). Relative to acquisition logistics, the Resource Sponsor's role is to:

- Act as the user representative through the PPBES process.
- Validate requirements, typically through Required Operational Capability and Projected Operational Environment (ROC/POE) and TOA approval.
- Program the funds necessary to develop and sustain programs that satisfy capability needs

3.2 Naval Facilities Engineering Command (NAVFAC)

NAVFAC provides program oversight of all expeditionary programs and serves as the lead SYSCOM for expeditionary system acquisitions and modernizations.

NAVFAC has management authority and accountability for assigned Navy Expeditionary Forces weapon, and IT system programs, or components not specifically assigned to other SYSCOM Commanders, a PEO or DRPM. NAVFAC's acquisition areas of cognizance include:

- Expeditionary and construction training systems and equipment
- Logistics-Over-The-Shore (LOTS), near shore, and ocean facilities infrastructure systems
- Expeditionary equipment, infrastructure, and IT systems, including Civil Engineer Support Equipment (CESE)

3.2.1 NAVFAC Expeditionary Programs Office (NEPO)

NEPO directs the NAVFAC Expeditionary Business Line (EX), providing overall program development, acquisition, management, and total life cycle support of assigned expeditionary forces weapons and Information Technology (IT) system programs or components. NEPO is vested with the authority, accountability, and resources necessary to manage all aspects of the program from concept to disposal. To meet the objectives of this policy the NEPO will:

- Provide broad policy guidance for materiel management, life cycle logistics support and materiel fielding.

- Develop and submit life cycle logistics funding summaries/ requirements.

- Provide oversight of the implementation and execution of life cycle logistics support for all fielded systems.

- Review and comment on acquisition and logistics documents.

3.2.2 Naval Facilities Expeditionary Logistics Center (NAVFAC ELC)

NAVFAC ELC is designated as the Acquisition and Engineering Agent for the Expeditionary Business Line. NAVFAC ELC directly supports the Navy Expeditionary Combat Command (NECC), Naval Beach Groups, NEMSCOM, NAVSPECWAR and other expeditionary units for initial outfitting and life-cycle management of materiel contained within their NAVFAC-managed Tables of Allowance (TOA). To meet the objectives of this policy, NAVFAC ELC will:

- Advise NEPO, TYCOMs and expeditionary units, assigned PMs, and Assistant Secretary of the Navy for Research, Development and Acquisition (ASN RD&A) on Acquisition Logistics policy for expeditionary equipment.
- Provide Integrated Logistics Support (ILS) management for assigned programs.
- Provide Logistics Program Management services as delegated by NEPO Assistant Program Manager for Logistics (APML).
- Provide In-Service Engineering Agent (ISEA) services for designated expeditionary systems and related CESE equipment.
- Coordinate logistics services with other ISEAs for Non-2C Equipment.
- Provide representatives and validate the process for Program Logistics Reviews (PLR) and Integrated Logistics Assessments (ILA).
- Review and comment on acquisition and logistics documentation.
- Oversee the implementation and execution of LCL support for all assigned systems.
- Act as the Functional Manager for Logistics Automated Information Systems (AIS).
- Provide centralized Expeditionary Distance Support management and coordination.
  - Ensure user requirements and issues are answered in a timely manner and identified issues are resolved based on overall program priorities.
  - Ensure feedback from all of the above sources is integrated to provide a total response and that all related elements are considered for corrective action.
- Execute tasks as outlined in Chapters 4 through 7.

3.3 TYCOMs

Relative to acquisition logistics the TYCOM's role is to:

- Execute ILS policy and operations to ensure assigned units comply with established procedures.
- Review and comment on acquisition logistics documentation.
- Provide representatives to participate in Acquisition Logistics IPTs.
- Complete system receipt processing when new equipment is received.

- Provide feedback on suitability and supportability of fielded products.
- Complete and properly submit Supply Discrepancy Reports (SDR) and Product Quality Deficiency Reports (PQDR) when necessary.
- Execute policy for materiel management, equipment and spares inventory, and execute initiatives such as Naval Tactical Command Support System (NTCSS) with subordinate Commands and units.

3.4 Naval Inventory Control Point – Mechanicsburg, PA (NAVICP-M)

The Program Support ICP (PSICP) performs all the actions, procedures, and techniques necessary to determine requirements, acquire, catalog, receive, store, transfer, issue, and dispose of the repair parts and consumable supplies, whether located at an activity or in the supply system, needed to support Expeditionary Programs. NAVICP-M is the PSICP for expeditionary systems and equipment. Relative to acquisition logistics NAVICP-M's role is to:

- Participate in expeditionary Supportability IPT operations.
- Perform as the expeditionary Supply Support Logistics Element Manager (SS LEM) and the NAVICP PM for expeditionary programs.
- Maintain adequate materiel spares range and depth to meet expeditionary mission requirements.
- Interface with the Defense Logistics Agency (DLA) concerning materiel management within their commodity responsibility.
- Generate outfitting requirements and other life cycle supply products and services.
- Maintain system materiel availability to achieve optimum operational readiness.
- Provide assistance to Program Offices and ISEAs for development of outfitting effectiveness and materiel availability metrics.

Chapter 4
Acquisition Logistics Planning

4.1 Acquisition Logistics Planning Guidelines

4.1.1 Purpose

This chapter provides acquisition logistics planning guidelines and procedures for full logistics support for expeditionary acquisitions. The purpose of the acquisition logistics planning process is to ensure that the design and acquisition of TOA materiel is economically supported and that expeditionary programs are provided with the necessary support infrastructure required to achieve the warfighter's peacetime and wartime readiness requirements. This chapter also establishes an acquisition logistics planning framework and guidelines for COTS and NDI AAPs.

4.1.2 Overview

DoD and SECNAV instructions prescribe that DoN PMs utilize the Defense Acquisition Framework (DAF) as a guide for managing system acquisition programs. A simplified diagram of the DAF is depicted in Figure 4-1. A detailed description of this process can be found at https://acc.dau.mil/IFC/index.htm. All expeditionary programs will adhere to the DAF, tailoring the acquisition logistics planning process when required.

For the typical program described by the DAF process, the majority of the critical acquisition logistics planning activities necessary to achieve program LCL objectives occurs in the early stages of program initiation. The planning that transpires in the earlier phases of the acquisition process presents the first substantial opportunity to influence weapon systems supportability and affordability by balancing logistics requirements with technology and operational requirements. Emphasizing the critical performance-sustainment link, desired user capabilities are defined not only in terms of objective metrics (e.g. range, speed, lethality) of performance to meet mission requirements affordably, but also of the full range of operational requirements (logistics footprint, supportability factors) to sustain the mission over the long term. To achieve an effective and affordable LCL support program, logistics supportability and support-related performance capabilities parameters should be planned for at program initiation and considered as a performance capability priority. Planning, acquiring, and allocating resources for logistics supportability should be mapped to these specific war fighter needs for support-related system performance.

Additionally, DoD acquisition guidance allows programs to enter the DAF at the appropriate milestone. As described previously, most expeditionary TOA materiel is either COTS or NDI equipment procured via programs designated as abbreviated acquisitions per SECNAVINST 5000.2. These program types do not typically flow through the early phases of the acquisition framework model but enter the process at Milestone C, passing over the critical early acquisition logistics planning necessary for a successful LCL program. For expeditionary programs that enter the acquisition framework model at Milestone C, many decisions that impact LCL objectives are defined by the Original Equipment Manufacturer (OEM) in their product design and are not influenced by program LCL objectives. While expeditionary programs cannot

typically influence COTS and NDI design, they can influence source selection criteria, ensuring that programs procure equipment whose designs best facilitate LCL objectives. To accomplish this, acquisition logisticians must employ a disciplined, structured approach to planning and executing the critical logistics planning functions necessary to meet DoD mandated total life cycle objectives. This planning process is provided below.

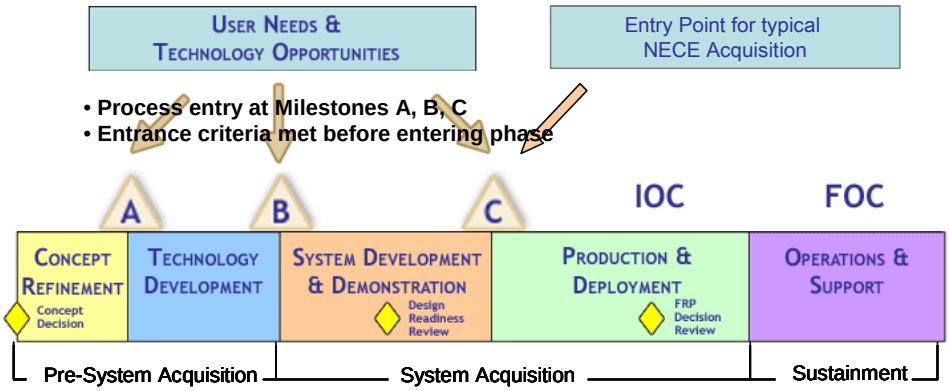

Figure 4-1 Simplified Defense Acquisition Framework

4.2 Acquisition Logistics Planning for COTS and NDI Programs

4.2.1 Introduction

As shown in Figure 4-1 above, expeditionary acquisitions typically enter the acquisition framework at Milestone C. Per DoD guidance, programs are authorized to enter the framework at either Milestone A, B, or C provided that entrance criteria established by the Milestone Decision Authority (MDA) is met. Entrance criteria are typically established to ensure that the program is ready to progress to the next phase. In accordance with SECNAVINST 5000.2, most expeditionary acquisitions are designated as AAPs and do not require formal entrance criteria; however, a disciplined, structured process is still necessary to successfully meet LCL objectives. The acquisition logistics activities that take place prior to Milestone C, in the Acquisition and Logistics Planning Phase, are designed to ensure that support considerations are an integral part of the source selection criteria. This framework is displayed in Figure 4-2.

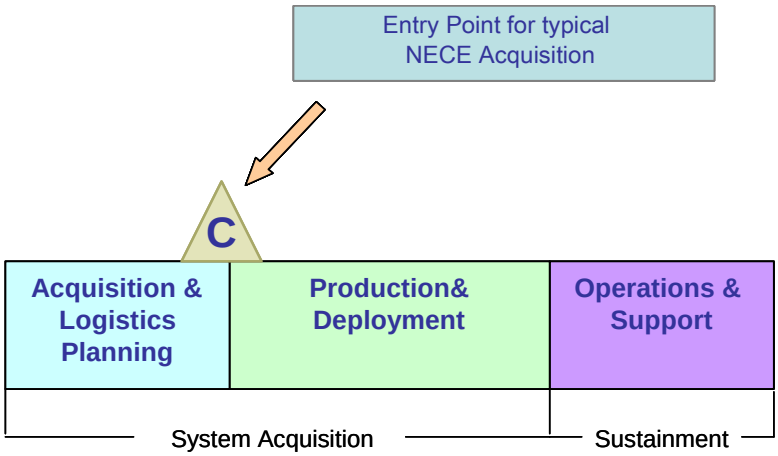

Figure 4-2 Expeditionary COTS and NDI Simplified Acquisition Framework

4.2.2 Process

Expeditionary AAPs for COTS and NDI equipment can entail either replacing an existing or procuring a new capability. When replacing an existing capability, the acquisition logistics planning process begins when a replacement/ acquisition decision is made. Replacement/ acquisition decisions are made to replace a system that is beyond its useful life and/or is no longer supportable. Acquisition decisions can also be made to refresh technology or to improve system capability for fielded systems. When procuring a new capability, the acquisition logistics process begins once it is determined that COTS or NDI materiel will satisfy the requirement and the program is initiated. Expeditionary Acquisition Logistics Managers shall use the DAF, Supportability Analysis guidelines provided in MIL-HDBK-502, and the process described in this section as a guide to creating a tailored approach for COTS and NDI AAPs. The Supportability Analysis is the principal analytical tool applied throughout the Acquisition Logistics Planning Process that ensures support requirements and infrastructure are defined. Following is a broad overview of the AAP Acquisition Logistics Planning process graphically depicted in Figure 4-3 below:

- Expeditionary AAPs are not typically supported with formal capabilities documents as outlined in CJCSI 3170.01. Each program should, however, be supported with a capabilities document that records the warfighter's operational needs tied to required system operational performance attributes, including supportability. The operational needs and system requirements should be documented in a Capabilities Development Document (CDD) and guide development of the system's acquisition, testing, and program support strategies. Acquisition Logisticians are an integral part of the system requirements review. During the requirements review, the Acquisition Logistician will gain a better understanding of how the system is to be employed, help shape capabilities that are supportable and meet life cycle cost objectives, and document RMS considerations as requirements in the system capabilities document. The CDD is the input for the Acquisition Logistics Planning process.

- The Acquisition Logistics Planning Process begins with a review of the system capabilities document and analysis of existing system Reliability, Maintainability, and Supportability (RMS) issues and concerns. The primary sources for RMS

information are from logistics system feedback reports and/ or from the maintenance history of the system. From the analysis of this data, the acquisition logistician will identify and document the major issues and/ or opportunities that impact RMS and life cycle cost. The Acquisition Logistician will use the input from the analysis to define a basic support strategy and maintenance concept. The support strategy should identify the basic approach the program will take to meet LCL objectives. The maintenance concept should state in broad terms how the system will be maintained to meet threshold availability objectives. The support strategy and maintenance concept form the foundation of the product support development process. At this point in the planning process, the acquisition logistician should identify any peculiarities in the support strategy or maintenance concept that aren't readily supported by the existing expeditionary logistics' infrastructure and processes and formulate plans to address infrastructure and process gaps.

- The next step in the acquisition logistics planning process is to perform market surveys. Market surveys are used to determine if current design trends address RMS issues, further refine the RMS issues the acquisition program is addressing, and identify the RMS market trends the program desires to capitalize on. Given that COTS and NDI AAPs do not allow for thorough supportability analysis, the acquisition logistician should analyze the commercial industry and OEMs for best practice maintenance concepts to reduce life cycle cost and improve RMS.

- Once market surveys are complete, the acquisition logistician should participate in any further reviews or refinements of the system's CDD and refine supportability performance requirements.

- Based on the analysis conducted thus far, the Acquisition Logistician will refine the support strategy to choose the best cost and most effective support alternative for the system and its maintenance concept.

- The last step of the Acquisition Logistics Planning Process is to document RMS objectives in capabilities and contractual documents. The purpose of this process is to ensure that life cycle logistics are adequately described so that they can be translated into real requirements that shape system source selection. The ILS elements that will comprise the Product Support Package (PSP) are also documented during this stage. Guidelines and procedures for developing the ILS elements of the Product Support Package are given in Chapter 5.

4.3 Joint Programs

Expeditionary Programs routinely acquire capability via Joint Programs. When participating in Joint Programs, NEPO will ensure that PSPs developed by the lead service are fully integrated into the Navy's logistics infrastructure. When equipment is procured via an established program that is post Full Rate Production (FRP), logistics products and data will be procured to develop PSPs that meet Navy requirements. When participating in a Joint Program that is pre-Full Rate Production, NEPO will ensure that Navy personnel are fully integrated into

system logistics requirements development and planning. This ensures that Navy requirements are fully integrated into the resulting PSPs.

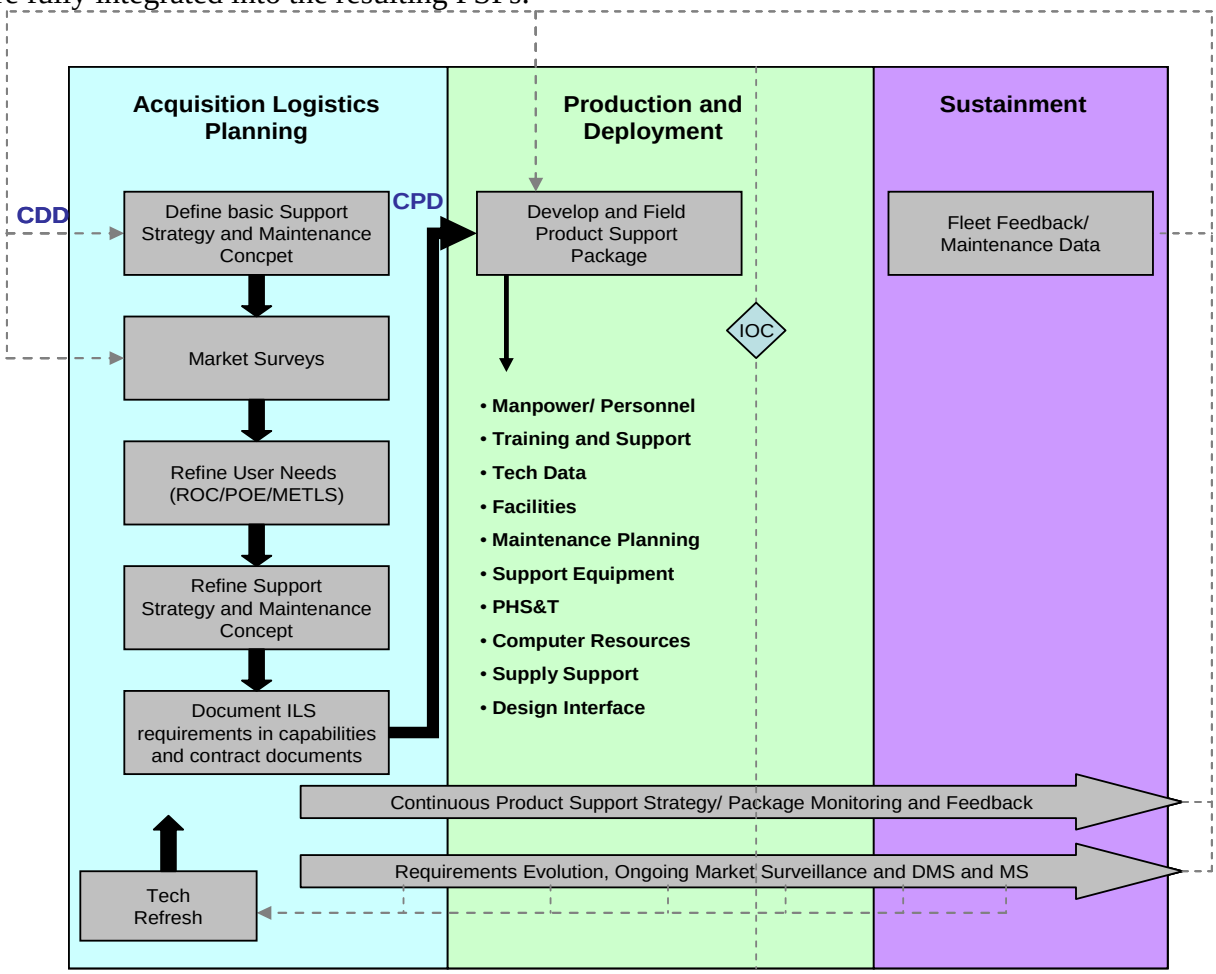

Figure 4-3 Expeditionary AAP Logistics Planning Process

4.4 Contractor Logistics Support

Expeditionary systems and/or equipment are primarily supported through organic resources. However, there are certain circumstances in which organic support is not available to meet the IOC, is not feasible, or is not the most cost effective means of supporting the system. Under those circumstances, expeditionary PMs may choose to employ contractor support. There are three basic types of contractor support which can be employed by expeditionary PMs: Interim Contractor Support (ICS), Contractor Logistics Support (CLS), and Performance Based Logistics (PBL).

4.4.1 Interim Contractor Logistics Support (ICS)

ICS is a temporary method of obtaining support for a system to enable fielding until shortfalls in organic support are overcome. It is NEPO policy that a system will not be fielded until all of the requisite logistics support is available where required. ICS is an interim means

used when organic support capabilities are not provided prior to IOC because of time or other program constraints. The duration of the ICS will vary by program, but in no case shall it exceed the time necessary to establish long term capabilities. Logistics support planning requirements are not diminished or relaxed because ICS is available.

4.4.2 Contractor Logistics Support (CLS)

CLS is a method of obtaining support for a product throughout its life cycle. CLS may be utilized as appropriate for all of the requisite logistics support for specific logistics functions (i.e., depot support, training, hardware, or software support). Since the use of CLS could diminish the Expeditionary Combat Forces' ability to fully sustain themselves, the decision will be based on full consideration of the system employment and deployment, readiness and sustainability requirements, design maturity, planned life cycle, manpower requirements and constraints, total life cycle costs, and system complexity. CLS contracts can be with the OEM or obtained via full and open competition. Also, CLS contracts may encompass the entire system, specific components of the overall system, or a specific level of support associated with the system.

4.4.3 Performance Based Logistics (PBL)

DoD Directive 5000.1 states that PBL is the preferred support strategy within DoD and should be considered and used whenever practical. PBL, unlike CLS or ICS, vests responsibility and authority with a government or private sector activity. The PBL activity is assigned performance objectives (Operational Readiness, cost avoidance, and other parameters) in providing routine organic ISEA and ILS roles. Additional PBL guidance can be found in the Product Support Guide available through the Defense Acquisition University Website at https://acc.dau.mil/CommunityBrowser.aspx?id=32536.

4.5 Materiel Fielding Process

In order to ensure that only safe, operational, and supportable products are fielded, the NEPO APML has developed a Materiel Fielding Process that results in a "formal" materiel fielding decision by the APML and TYCOM. The Materiel Fielding Process is completed prior to placing the system in service. The Materiel Fielding Process is fully described in Chapter 6.

4.6 Periodic Logistics Assessments

Throughout the acquisition and Materiel Fielding process, periodic reviews are conducted to assess the effectiveness of logistics planning and post fielding supportability of the product. These assessments should involve representatives from the expeditionary forces. Detailed guidelines for periodic logistics assessments are provided in Chapter 7.

4.7 Modernization

After system fielding, it may be necessary to alter or change the configuration based on emerging operational requirements, improved technology, or to improve life cycle cost. All changes which affect Form, Fit or Function as defined in MIL-HDBK-61A must be managed via the alteration process. Alterations and changes are reviewed with respect to their impact on safety, operational readiness, life cycle cost and supportability to the system and thoroughly assessed. Each of the support elements and related disciplines are analyzed to determine the impact of the proposed alteration on the system. All impacts to the support structure (i.e., manpower, training, technical manuals, spare parts, etc.) are carefully assessed, planned for, and executed. When approved by the NEPO Configuration Control Board (CCB) a CCB Directive is issued stipulating approved and authorized alterations, installation schedule, impacts on the PSP, and authorized costs.

4.8 ILS Integrated Product Teams (IPT)

IPTs are utilized to perform many acquisition planning functions to include oversight and review. IPTs function in a spirit of teamwork with participants empowered to make commitments for the organization or the functional area they represent. IPTs are comprised of representatives from all appropriate functional disciplines working together to build a successful program and ensuring that all logistic support issues are addressed.

ILS IPTs focus on acquisition and life cycle logistics and ISEA functions. They serve as a critical element of a program to ensure positive impacts to RMS and Total Life Cycle Cost are realized throughout the life cycle of the program. Prior to a Materiel Fielding decision, ILS IPT concepts are applied in Expeditionary programs for the total life cycle to ensure integrated support for the warfighter.

4.9 Process Integration

The acquisition logistics planning process is a repetitive and/or iterative process that requires integration with both the concept based requirements development and acquisition management processes. As systems move forward through the acquisition process, there is a repetitive review of supportability and cost issues. This repetitive, iterative review of requirements versus materiel solution and support concepts ensures that the users receive a product that meets their needs and is supportable throughout the system life cycle.

4.10 Rapid Deployment Capability

SECNAVINST 5000.2 provides capability to meet urgent warfighter needs called the Rapid Deployment Capability (RDC) Process. Though tailored and expedited, acquisition logistics manager must plan and deploy the full spectrum of logistics support.

Chapter 5
Supportability Elements and Related Disciplines

5.1 Purpose

As described in Chapter 4, one of primary outputs of the Acquisition Logistics Planning process is the requirements for product support. Product support consists of both the ten ILS elements and related supportability elements. This section provides guidelines for the development and management of each of the ILS elements and related supportability disciplines. For each element and related discipline an introduction, process overview, responsibilities, and references are provided. Logistics Element Managers supporting expeditionary programs shall use the guidelines provided in this chapter to develop the ILS elements that comprise the Product Support Package.

5.2 Background

Providing logistics support for a system requires the acquisition and integration of support by a variety of offices and/or agencies in many different functional areas. The integration of these elements and disciplines into a system's design is essential to acquiring systems that meet operational and support objectives at fielding and exhibit reasonable life cycle costs. The NEPO APML has the lead for planning and executing supportability processes for expeditionary programs.

5.3 ILS Elements

5.3.1 Maintenance Planning

5.3.1.1 Maintenance Planning Process

5.3.1.1.1 Overview

Maintenance Planning is the foundation of effective life cycle planning. The maintenance plan may include the technical manual, spare parts, drawings, and other data required to ensure a cost effective system, minimized life cycle cost, and reliability/readiness parameters. Maintenance Planners will use the LSA process as a guide for developing the maintenance plan. The PM has the responsibility for establishing the maintenance plan. Maintenance planning is an iterative process to explore alternatives and to establish concepts and plans for maintaining a system throughout its life cycle and provides the basis for development of all other logistics support requirements. This process starts with the development of a maintenance concept which is published in requirements documents in very broad terms. As an acquisition program proceeds through the various acquisition phases, maintenance planning will become more defined. Ultimately individual maintenance actions are assigned to appropriate levels of maintenance. Maintenance planning is performed to ensure:

- Development of the minimum set of maintenance requirements necessary to operate the equipment at its assigned readiness threshold. For COTS and NDI programs a great percentage of the maintenance plan and concepts have been pre-

determined by the Original Equipment Manufacturer (OEM) and documented in the equipment's technical manual.

- Assignment of maintenance tasks to the appropriate level where they are accomplished most efficiently and effectively.

- Development of a maintenance concept and detailed maintenance planning which will provide the information necessary to support logistics planning and management decisions.

5.3.1.1.2 Process

For all expeditionary acquisitions, maintenance planning will begin at the initiation of the program. As the system design progresses, maintenance plans are refined into a maintenance concept based on the results of specific tasks within the supportability process. These tasks include Supportability Analyses, Level of Repair Analysis (LORA), Failure Modes, Effects Analysis (FMEA), and warranty provisions. The LSA process will be used as a guide to developing the maintenance plan. Complexity and cost of the system, preventive and corrective maintenance tasks, and the skills and numbers of personnel required and available are some of the areas analyzed to refine the maintenance plan. The maintenance concept will be documented in the ULSS. For COTS and NDI AAPs, maintenance planning is conducted by the OEM and the life cycle costs, maintenance, and supportability are driven by the OEM's design.

5.3.1.1.3 Responsibilities

- NEPO APML is responsible for coordinating maintenance planning policy and oversight for expeditionary programs.

- Cognizant ISEAs will assign a Maintenance Planning LEM for each acquisition. Specifically ISEAs will:

  - Provide input to NEPO/ PM, to outline the initial maintenance concept, which is developed through review of historical, comparative analysis, cost data, and unique support and/or employment requirements.
  - Provide technical guidance and/or support to NEPO/ PM to ensure that individual maintenance concepts and plans are formulated in accordance with established NEPO/ PM guidance. This planning can be accomplished internally by the ISEA or may include actions by the system contractor and/or Government agency.
  - Provide depot maintenance planning.
  - Conduct evaluation of multiple sources of user feedback to determine readiness and maintenance circumstances. The result of the assessment may result in changes to the maintenance tasks, revision to technical manual information, or operator training changes.

5.3.1.1.4 Reference Directives

- MIL-STD-1388-1A, “Logistics Support Analysis”
- MIL-STD-1388-2B, “Logistics Support Analysis Record”
- MIL-PRF-49506, “Logistics Management Information”
- GEIA-HB-0007, “Logistics Product Data”
- OPNAVINST 4790.4E, “Ships’ Maintenance Materiel Management (3-M) System Policy”
- OPNAVINST 4790.16, “Condition Based Maintenance Instruction”

5.3.1.2 Planned Maintenance System (PMS)

5.3.1.2.1 Introduction

A critical task in the maintenance planning process is identifying those preventive maintenance checks and services that maintain equipment at specified readiness goals. PMS is a standardized method for planning, scheduling, and accomplishing preventive maintenance by the expeditionary force. All expeditionary acquisitions will use Reliability-Centered Maintenance (RCM) methodologies to develop the PMS requirements for a system and each system will be covered by a Maintenance Index Page (MIP). The goal of RCM is to identify the minimum preventive maintenance procedures required to maintain equipment in a fully operable condition within specifications.

5.3.1.2.2 Process

As part of the maintenance planning process, each support worthy system procured for the expeditionary forces will undergo an RCM analysis to establish preventive maintenance requirements.

5.3.1.2.3 Responsibilities

- NEPO APML is responsible for developing a PMS policy for implementation by the expeditionary forces and for coordinating the PMS program.

- The assigned ISEA is responsible for conducting RCM analysis and developing MIPs/Maintenance Requirements Cards (MRCs) for each system.

5.3.1.2.4 Reference Directives

- MIL-P-24534A, “Planned Maintenance System: Development of Maintenance Requirement Cards, Maintenance Index Pages, and Associated Documentation”
- OPNAVINST 4790.4E, “Ships’ Maintenance Materiel Management (3-M) System Policy”

5.3.2 Manpower and Personnel

5.3.2.1 Introduction

In order to maximize the return on limited resources, it is important that the Manpower and Personnel managers take every opportunity to reduce, or constrain resource requirements. The Defense Acquisition process provides the opportunity to limit acquisition system Manpower and Personnel resource requirements by establishing constraints early in the acquisition process. The objective is to constrain system requirements to "affordable levels" and to set thresholds and objectives based on factors such as: what resources are already available when the current system is taken out of the inventory, and what impacts ongoing infrastructure reinvention and streamlining initiatives and force structure reductions will have on Component out-year resources. Once the limits are identified, it is the APML's responsibility to communicate those limits to the PM as program constraints in the system capabilities document. Unless the constraints are included in the system capabilities document, the PM is not obligated to consider them when developing a system design solution and making tradeoffs during the system engineering process. The manpower staffing process can be lengthy, taking up to five years to fill new personnel requirements with the proper numbers, grades and skills of personnel. Even when staffing requirements can be met within the existing personnel inventory, variations in recruiting, training, and promotion plans can cause a delay of at least six months between the approval of personnel changes and the arrival of new personnel. In lieu of requesting changes to personnel manning levels, other means to accomplish the mission, such as internal reorganizations, should be explored.

5.3.2.2 Process

NEPO APML is responsible for coordinating Manpower and Personnel planning with the TYCOMs in support of expeditionary acquisition programs. The Manpower and Personnel plan shall be accomplished at the lowest lifecycle cost and be consistent with Navy staffing policy. In this capacity, the APML will ensure that specific manpower requirements are determined for each new system and/or product entering the expeditionary inventory as well as for major modifications of existing systems. These requirements, which are identified through the Navy Training System Plan (NTSP) process, can range from no additional manpower, one-for-one replacement items of equipment, to a significant manpower increase or decrease for new items. An assessment of manpower impact is made to identify critical manpower issues and to determine the manpower required to support the program. During the acquisition logistics planning phase, an estimate of manpower goals and constraints for operating, maintaining and supporting the emerging system are developed and documented. To ensure that manpower factors are considered during system acquisition, it is essential to have a definitive manpower acquisition development strategy prior to Milestone C. The specific manpower requirements for a system are identified in the NTSP and the unit's manpower documents which state the manpower requirements necessary to accomplish the assigned mission of an organization. If the units operating, maintaining, and supporting the new equipment do not have personnel with the correct skills, grades or organizational structure on their existing unit manpower documents, then the documents may have to be modified. When manpower changes are required, NEPO APML will work with the TYCOM's N1 to submit changes to OPNAV.

5.3.2.3 Responsibilities

- NEPO APML is responsible for coordinating manpower needs for sustainability with the TYCOM.
- NEPO APML coordinates all personnel structure and equipment allowance requirements for new personnel and/or equipment.
- NAVFAC ELC N43 is the manpower LEM and is responsible for providing guidance and/or support to the NEPO on manpower issues.
- NAVFAC ELC N43 is also the focal point for Training Planning Process Methodology (TRPPM) analyses.
- Manpower changes are submitted by the TYCOM.

5.3.2.4 Reference Directives

- OPNAVINST 1500.76, "Naval Training System Requirements, Acquisition, and Management"
- OPNAVINST 1000.16, "Navy Total Force Manpower Policies Procedures"
- OPNAV P-751-1-9-97, "Navy Training Requirements Documentation Manual (NTRDM)"
- OPNAV P-751-2-9-97, "Training Planning Process Methodology (TRPPM) Guide"
- OPNAV P-751-3-9-97, "Training Planning Process Methodology (TRPPM) Manual"

5.3.3 Supply Support

5.3.3.1 Introduction

Supply support consists of all management actions, procedures, and techniques used in acquiring, cataloging, receiving, storing, transferring, issuing, and disposing of equipment, and spares and/or repair parts. The aim for all expeditionary programs is to have adequate organic supply support to achieve system readiness objectives available at the proper echelons of supply and maintenance prior to IOC. This support, including spare and/or repair parts and publications, are continued throughout the system's life cycle. When organic support cannot be put in place prior to IOC, interim supply support strategies will be employed. There are three primary areas that an acquisition supply support program should address: provisioning, cataloging, and replenishment.

- Provisioning is the process of determining which materiel and how much of that materiel is necessary to support and maintain a system or equipment for all levels of maintenance (organizational, intermediate, and depot) for an initial period, not to exceed two years. Provisioning must include the identification, selection, and acquisition of initial support items required for maintenance and provides instructions to ensure these items are prepositioned in the supply system and/or maintenance echelons before new systems are placed in service. The assignment and verification of supply management codes such as Source, Maintenance, and Recoverability (SMR) codes, criticality classification, item management, and others occur during the provisioning process and must be consistent with other supportability analysis processes.

- Cataloging is the process that establishes a National Stock Number (NSN) and Federal Item Identification in all logistics files for new systems and for all items of supply required for that system. This includes data required for the Logistics Management Information System (LMIS) and Federal Logistics Information System (FLIS).

- The replenishment phase of supply support is the means by which spares are positioned and sustained in DoD supply chains. This process is a continuous updating or refinement of the support requirements identified prior to system fielding. These requirements, which were based on anticipated failure rates, logistics delay times and other related factors during provisioning, must be recomputed based on actual values measured during the fielding/deployment phase. Each system may have unique post production support problems, many of which were not anticipated. These problems may include obsolete parts, inadequate sources of supply for the spare and/or repair parts, and changes in technology. Issues are mitigated as part of the replenishment process.

The military components and DLA are assigned as a Primary Inventory Control Activity (PICA) or Secondary Inventory Control Activity (SICA) for specific commodities of materiel. Inventory Managers, working at various inventory control points, are assigned item management responsibility. NAVFAC ELC manages only a small percentage of the materiel used by expeditionary forces. NAVFAC ELC manages items having a 2C cognizant (COG) code.

5.3.3.2 Process

The acquisition supply support process begins well ahead of the procurement process. Supply Support LEMs analyze out-year equipment buy plans to establish and develop Program Objective Memoranda (POM) for spares budget requirements. This process is performed jointly with cognizant ISEAs and NAVICP and shall be managed through the Program Support Data (PSD) process. The PSD process identifies program spares requirements and attempts to procure and position spares ahead of program outfitting requirements. Expeditionary programs shall ensure that each program submits PSD sheets to identify spares funding requirements. At program initiation, supply support LEMs will plan for and execute program provisioning, cataloging and replenishment requirements. As programs begin to install new equipment, spares budgets will be utilized to “buy out” spares managed by NAVICP and DLA to support the new equipment installations. Expeditionary programs will use the standard Navy outfitting process. A detailed description of the supply support process, that expeditionary programs will adhere to, is provided in NAVSEA Technical Specification 9090-1500 Provisioning, Allowance, and Fitting Out Support (PAFOS) Manual.

5.3.3.3 Responsibilities

- NEPO APML
  - Responsible for supply support policy coordination with expeditionary forces.
  - Provide oversight and control for the spares budgeting process.

- Cognizant ISEAs
  - Complete and input PSDs.
  - Serve as Technical Support Activity (TSA) for their supported programs and coordinate provisioning input into the Interactive Computer Aided Provisioning System (ICAPS) system.
  - Budgeting and inventory management for interim supply support and outfitting.
  - Procurement, Review, and Approval of Provisioning Technical Documentation (PTD).
  - Buy-out of outfitting spares.
  - Repair and disposal of repairable items.
  - Provide technical guidance and support to the APM on provisioning matters.
  - Responsible for using cataloging information to update Logistics Assessment files.
  - Responsible for processing the Cataloging Action Request (CAR) and responding to the originating office for items having a 2C COG.
  - Outfitting.

- NAVICP-M
  - Serves as the Program Support Inventory Control Point (PSICP).
  - Develops Allowance List.
  - Manage Navy Working Capital Fund (NWCF) Operations.
  - Inventory Management.
  - Secondary Item Procurement.
  - Receipt, Storage, and Issue of Repair Parts.
  - Repairable Item Management.
  - Buy-in of Outfitting Spares.
  - Completes necessary item cataloging and provides interface with the DLA for cataloging and materiel availability for materiel requirements.
  - Assist in resolution of supply support matters within NAVICP (M) and DLA.
  - Provide services as the Supply Support LEM and NAVICP PM for expeditionary programs.
  - Responsible for all actions regarding items having a COG beginning with 1 or 7 and facilitating with DLA for all other COG materiel.

5.3.3.4 Reference Directives

- SECNAVINST 5000.2, “Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System”
- NAVSUPINST 4441.170, “COSAL Use and Maintenance Manual”
- NAVSEA Technical Specification 9090-1500, “Provisioning, Allowance, and Fitting Out Support (PAFOS) Manual”
- NAVSUP P485, “Volume I, Afloat Supply Procedures”
- DoD Directive 4140.1, “Supply Chain Materiel Management Policy, April 22, 2004”

5.3.4 <u>Support and Test Equipment (S&TE)</u>

5.3.4.1 Introduction

Support Equipment (SE) is categorized as either Common Support Equipment (CSE) or Peculiar Support Equipment (PSE). CSE, which consists of multipurpose SE, is procured as either Commercial off-the-Shelf (COTS) or Non-Developmental Items (NDI). PSE consists of non-standard SE that is unique to and designed for a single system or subsystem. There are four SE categories of CSE and PSE:

- Ground Handling and Maintenance Equipment
- Tools, Jigs and Fixtures
- Miniature/Micro-miniature (2M) Repair Kits
- Test, Measurement & Diagnostic Equipment (TMDE), which is comprised of both General Purpose Electronic Test Equipment (GPETE) and Special Purpose Electronic Test Equipment (SPETE)

As related to the Integrated Logistics Support doctrine, "Support Equipment" and "Test Equipment" are frequently defined in separate groupings such as "Support and Test Equipment" (S&TE). However, DoD Standard Practice for Calibration and Measurement Requirements (MIL-STD-1839C) addresses "all equipment used in calibration and maintenance support of mission and operational equipment" as Support Equipment (SE). In addition to GPETE and SPETE, various subcategories of TMDE exist. Of note are Automated Test Systems (ATS), Automated Test Equipment (ATE), and Built-In-Test Equipment (BITE).

SE support of expeditionary systems and equipment is defined as "any system or device used to test, measure, evaluate, inspect, or otherwise examine materiel, supplies, equipment, or a system to identify and/or isolate any actual or potential malfunction, or to determine compliance with specifications established in technical documents" (e.g. research, development, test, evaluation documents, specifications, engineering drawings, etc). SE that provides this type of service is managed under the NAVSEA TMDE Program, MIL-STD-1839C, which stipulates specific procedures concerning the selection, acquisition, and induction of TMDE. The standard also provides a process for calibration and measurement traceability of all systems, subsystems, and equipment parameters, which ensures system and equipment operational integrity and accuracy. This includes the establishment of traceability from actual system and equipment level measurements to the National Institute of Standards and Technology (NIST).

5.3.4.2 Process

- The SYSCOM will use MIL-STD-1839C (in conjunction with the DoD Calibration and Measurement Requirements, MIL-HDBK-1839A) to apply selective scientific and engineering efforts in determining TMDE requirements.

- Each item being considered for acquisition shall have an associated "Calibration and Measurement Requirements Summary (CMRS)" / DD Form 1426 completed and submitted to NAVSEA for review and approval via NSWC detachment Seal Beach, Corona Division CA. This process shall be completed by the ISEA prior to the acquisition of any TMDE. By providing all sustainment maintenance measurements required, NAVSEA TMDE will match the instrument best suited for the particular

measurements and provide that recommendation by SCAT and its associated NAVSEA Standard model numbers.

5.3.4.3 Responsibilities

- NAVSEA TMDE Program through NSWC Corona Detachment Seal Beach will serve as the expeditionary systems ISEA for TMDE. The TMDE Program is responsible for life cycle management, including the responsibility for comprehensive calibration support, acquisition, modernization, standardization, obsolescence replacement and equipment retirement.

- NAVSEA TMDE program will centrally procure TMDE in coordination with and funded by NAVFAC ELC.

- NAVFAC ELC, N44 will advise NSWC, Indian Head Division, Detachment Earle NJ of TMDE requirements in support of maintaining onboard command allowances, and accuracy of the Ship/Shore Portable Electrical/Electronic Test Equipment Requirements List (SPETERL). Accordingly, NEPO/ PMs will keep the resource sponsor advised of any financial impact.

- NAVFAC ELC, N44 is responsible for coordinating Support Equipment policy for expeditionary programs with the TYCOMs. This responsibility includes the overall planning and programming of funding for all Support Equipment budgeting, and initiating procurement of new or replacement test equipment and calibration standards.

5.3.4.4 Reference Directives

- MIL-HDBK-300, “DoD Technical Information File of Support Equipment”
- MIL-STD-1839C, “DoD Standard Practice for Calibration and Measurement Requirements”
- MIL-HDBK-1839A, “DoD Handbook, Calibration and Measurement Requirements”
- OPNAVINST 3960.16, “Navy Test, Measurement and Diagnostic Equipment (TMDE), Automatic Test Systems (ATS), and Metrology and Calibration (METCAL)”
- NAVSEAINST 4734.1, “NAVSEA Test, Measurement and Diagnostic Equipment (TMDE) and Calibration Programs”
- NAVSEA SN510-AU-CAT-010, “Catalog of Navy Materiel applicable to Propulsion Machinery”
- MIL-PRF-38793, “DoD Calibration Procedures Preparation”
- “NAVSEA Test Measurement, and Diagnostic Equipment Index (TMDEI)”, (supersedes NAVSEA ST000-AA-IDX-010-PEETE)
- NAVSEA ST000-AB-GYD-010/PEETE, “Stowage Guide for Portable Electrical/Electronic Test Equipment (PEETE)”

- ANSI/NCSL Z540-1-1994, "Calibration Laboratories and Measuring and Test Equipment – General Requirements" (pending approval of superseding document Z540-3-2006)
- ISO 10012-1-2003, "Quality Assurance Requirements for Measuring Equipment"

5.3.5 Technical Data

Technical data consists of all recorded scientific and technical information regardless of form or characteristics. Technical data includes engineering drawings, operator, maintenance and parts manuals, specifications, inspection test and calibration procedures, and computer program software documentation. Technical data is acquired to:

- Control the acquisition program.
- Define the design (i.e. engineering drawings, equipment specifications, and technical manuals).
- Ensure the right program technical decisions are made.
- Provide for supportability (i.e. provisioning data and technical publications).
- Ensure the operational effectiveness of the system (i.e. test plans and reports).

5.3.5.1 Technical Data Management

5.3.5.1.1 Introduction

Technical data management encompasses the identification, coordination, collation, validation, integration, and control of data requirements. This process includes planning for economical acquisition and timely receipt of data, ensuring the data is adequate for its intended use, and managing the data assets after their receipt. Data management includes monitoring the storage, retrieval, and disposal of data.

5.3.5.1.2 Process

- The need for data must be based on operational planning factors leading to the requirements for a specific system. Data requirements vary from one acquisition phase to another and from one program to another. Those personnel requesting data must ensure that only data actually needed to support the acquisition program during a particular acquisition phase is ordered or price optioned prior to the phase required.

- Technical data requirements are placed on contract by means of a Contract Data Requirements List (CDRL) (DD Form 1423). This form defines the data requirement, the delivery schedule(s), the distribution, and the review and approval cycles. The data requirements are specified on the CDRL by means of a Data Item Description (DID) (DD Form 1664). Once the CDRL is reviewed and approved by the PM, the form becomes an attachment to the contract. The data placed in the contract is delivered to the addressees in block 14 of the CDRL. At that point the addressees are responsible for reviewing the data to ensure it meets

the contractual requirements (and can be used for its intended purpose) and for notifying the contracting officer of acceptability or needed corrections. A process must be established to monitor the status of each CDRL on a contract. This monitoring must include: the date(s) on which the data is due; actual date of receipt; whether Government response is required and due date; date accepted or rejected; and whether submission and response are timely.

5.3.5.1.3 Responsibilities

- The NAVFAC APML is responsible for coordination technical data management policy for expeditionary programs.

- System ISEAs are responsible for providing guidance and support to the PM on technical data matters. Responsibility for identifying specific data requirements to support an acquisition lies with the individual or office who needs and/or uses the data or has responsibility for the functional area that needs and/or uses the data (i.e., NAVFAC ELC N43 is responsible for identifying the data needed to perform and support provisioning).

- The data management officer at the acquiring activity is responsible for ensuring that the acquisition of data is in accordance with established DoD and Navy policy.

- The PM is responsible for approving the data acquired in support of the product.

5.3.5.1.4 Reference Directives

- DoD 5010.12-M, “Procedures for the Acquisition and Management of Technical Data”

5.3.5.2 Engineering Drawings

5.3.5.2.1 Introduction

Engineering drawings are graphic depictions of the physical characteristics of a system. There are four levels of engineering drawings; conceptual, developmental, product, and commercial. Further information can be found in MIL-DTL- 31000C, Technical Data Packages. These drawings are used to ensure proper configuration control, support quality assurance and procurement functions, and fulfill logistics requirements.

5.3.5.2.2 Process

Throughout the acquisition cycle, engineering drawings are used to record and evaluate a contractor's progress in developing a program. While the conceptual drawings are not always specified as a deliverable under a contract, they are often provided to the Government to evaluate the equipment design. When the drawing deliverables are required by the Government, they are usually Product level. The requirement for these drawings must be specified by a

CDRL in the contract. Drawings are required for COTS and NDI materiel as necessary for design disclosure, future spares procurements, and field technical documentation/maintenance manuals.

5.3.5.2.3 Responsibilities

- NEPO APML is responsible for engineering drawings policy.

- ISEAs will designate a technical data LEM and are responsible for providing technical guidance and/or support to the PM on drawing matters.

- The NEPO/ PMs are responsible for ensuring that drawings required to support the acquisition strategy are acquired via a CDRL in the contract. The engineering drawing LEM will assist the PM in defining the requirement and assisting in the review of the deliverables. Sufficient design disclosure should be obtained (at a minimum) to support re-procurement actions, and field documentation such as technical manuals.

5.3.5.2.4 Reference Directives

- MIL-HDBK-288B, Review and Acceptance of Engineering Drawing Packages.
- MIL-DTL-31000C, Technical Data Packages

5.3.5.3 Technical Publications

5.3.5.3.1 Introduction

Military (Navy/Army/ Marine) Technical Publications (MTPs) are used for training, repairing, replacing, preventative maintenance Allowance Parts List (APL) development and Allowance Equipment List (AEL) development for each piece of equipment or vehicle. Each piece of equipment or vehicle requires a complete set of manuals which include the following types of manuals:

- Parts: Shall include illustrated parts breakdown with exploded views of major components in order to identify parts for procurement, replacement or service.

- Operators: Contains necessary information for the equipment or vehicle operators to safely operate equipment.

- Maintenance: Shall contain information relating to preventative maintenance, such as replacing fluids, adjustments, components, etc..

5.3.5.3.2 Process

- Normally each new system entering the inventory or each existing system, which is modified, will require new or revised technical publications. These

publications may be anything from copies of a hardware contractor's existing publication for COTS or NDI, to full military-formatted publications for a newly developed system, to Interactive Electronic Technical Manuals (IETM). The technical publications are normally developed by the hardware contractor during the development of the system. Scheduling the delivery of the technical publications is a critical issue. Quality control procedures, such as the validation of publications by the developing contractor and verification of publications by the government prior to delivery of the final product, must also be scheduled as part of the contractual requirements.

- Whenever possible the technical military manual requirements are specified as a separate line item in the contract, and described by means of a Technical Manual Contract Requirement (TMCR) attachment. The TMCR will require the development of digitized technical publications.

- Commercial manuals and supplemental requirements are described in the Performance Work Statement (PWS). A Technical Manual Contractual Requirement (TMCR) is used only for Military Specification (MIL-SPEC) publications. However, if commercial manuals are submitted by the contractor as part of the "system" documentation, they can be addressed in the TMCR.

- When technical publications from other sources (i.e., commercial manuals, other service publications) contain parts lists and components of end item lists, these lists are to be adapted for Navy use. Parts lists data must be coordinated with the system ISEA or TSA.

5.3.5.3.3 Responsibilities

- NEPO APML
  - NEPO APML is responsible for technical publications policy, except for software, within the NAVFAC.
  - Assigns a Technical Manual Maintenance Agent (TMMA) for each program.

- TMMA
  - Responsible for identifying specific technical publications requirements and for providing the TMCR to the PM for inclusion in the procurement contract as appropriate.
  - Responsible for the procurement of publications for auxiliary support equipment.
  - Responsible for the staffing review, verification, and direct the printing and distribution of new technical publications.
  - Responsible for all technical publications once they have been published and fielded.
  - Responsible for obtaining digitized Technical Manuals and loading them into the Naval Logistics Library (NLL).

5.3.5.3.4 Reference Directives

- NAVSEAINST 4160.3A, “Technical Manual Management Program (TMMP)”
- MIL-HDBK 502, “Acquisition Logistics”

5.3.5.4 Data Rights

All NAVFAC contracts for materiel, where technical data is required, will contain the appropriate “data rights” clauses per DFARS 227.7102. Data rights ensure that the government is granted specific license rights in technical data pertaining to commercial items or processes. It also ensures that expeditionary programs may use, modify, reproduce, release, perform, display, or disclose data only within the Government in support of program requirements. If additional rights are needed, contracting activities must negotiate with the contractor to determine if there are acceptable terms for transferring such rights. The specific additional rights granted to the Government shall be enumerated in a license agreement made part of the contract. Government data rights fall into four categories.

- Unlimited Rights.
- Government Purpose Rights.
- Limited Rights.
- Specifically Negotiated License Rights.

5.3.6 Training and Training Support

5.3.6.1 Introduction

Training and training support encompass the processes, procedures, techniques, training devices, and equipment used in training personnel to operate and maintain a system. This includes initial training to place the system into service, new equipment and follow-on training. The goal of the training function is to ensure that all training resources and programs are provided at the proper time and place to ensure that the procured system can be properly operated and maintained.

5.3.6.2 Process

Specific training and support requirements must be determined for each new system entering the expeditionary inventory as well as for each alteration of an existing system. These requirements are identified through a tailored TRPPM and Front End Analysis, which should be conducted during the early stages of an acquisition program. Requirements for a NTSP are identified in OPNAVINST 1500.76A Naval Training System Requirements, Acquisition, and Management. Programs to recapitalize existing systems that have a NTSP will require an NTSP review and, if required, update prior to IOC. The NEPO APML will designate Developing Activity and TSA responsibilities for each expeditionary program. Each designated activity will execute their responsibilities per OPNAVINST 1500.76A.

5.3.6.3 Responsibilities

- NEPO APML is responsible for the coordination of training policy for expeditionary equipment with the expeditionary forces.

5.3.6.4 Reference Directives

- OPNAVINST 1500.76A, "Naval Training System Requirements, Acquisition, and Management"

5.3.7 Computer Resources Support

5.3.7.1 Introduction

Computer resources support is the process of selecting computer hardware, software, and firmware and planning for the life cycle support of each. The computer resources element exists primarily to decrease the life cycle costs of automated systems through the standardization of hardware, software and firmware. This goal must be balanced against the goal of selecting hardware, software, and firmware that optimize system performance.

5.3.7.2 Process

- Planning for the development, acquisition and support of the computer hardware, software, and firmware must begin concurrently with the program planning.

- Each tactical data system or other system acquisition which includes computer resources shall have a designated Software Support Activity (SSA). The SSA shall be designated by Milestone A of the acquisition or at program initiation. The SSA will participate in software and hardware design reviews. When another service or activity is designated as the SSA, a Memorandum of Agreement (MOA) which assigns specific responsibilities should be developed between NAVFAC and the other service or activity.

- The NAVFAC systems/equipment software components will follow the guidance of DoD-STD-2167A, DoD-STD-2168, MIL-STD-973 and MIL-STD-1521B. Specific attention must be given during acquisition and logistic planning for:
  - SSA participation in IPTs, hardware, software, and system interface design reviews.
  - Definition of deliverable software components and associated technical documentation and system manuals for the:
    - Control of Developmental Item (DI) software.
    - Control and configuration management of software.
    - Control and configuration management of System Interfaces between software components.
  - Identification and definition of software developmental tools that will be required for software maintenance and supportability by the SSA including test program sets, Built In Test (BIT), Built In Test Equipment (BITE), and any test input data.
  - Identification of the hardware and software (including firmware) SSA support environment, including any special hardware requirements such as graphic displays, communications, or testing devices.
  -

- Provision for the delivery of technical documentation on hard copy and on magnetic media and the hardware and/or software required to support this type of information transfer.

- Ensuring that all documentation (DI, NDI, and system interfaces) are in accordance with current military hardware and software guidance.

- Addressing the maintainability and supportability issues concerning data rights and proprietary data, third party vendors, and second source acquisition for each Computer Software Configuration Item (CSCI).

- Identifying the prerequisites or criteria for classifying software as NDI, i.e. reliability, degree of stress testing, maintainability, known errors, longevity of use, configuration control, and base lining techniques.

5.3.7.3 Responsibilities

- NEPO APML
  - Responsible for coordinating Mission-Critical Computer Resources (MCCR) policy with expeditionary forces.
  - Responsible for designating an SSA by Milestone A or program initiation and for obtaining TYCOM concurrence in that designation. When nonstandard computer hardware or software is proposed for use, NEPO APML is responsible for requesting approval to deviate from the use of standard computer hardware and software.

- NAVFAC ELC N44/ ISEAs
  - Serve as functional manager for all Logistics AIS.
  - Serve as Computer Resources LEM.
  - Provide technical guidance and/or support to the NEPO APML on MCCR issues.
  - Responsible for reviewing and approving Common Computer Resources (CCR) or disapproving requests for waivers and/or deviation from the use of standard computer hardware.
  - Provide technical guidance and/or support to the NAVFAC PMs and the NECC on software matters including those relating to the software portion of firmware.
  - Produce approved firmware revision masters in addition to providing and supporting those changes.
  - Assess software supportability as part of the logistics appraisal process.
  - Responsible for provisioning and fielded system support of computer hardware.

5.3.7.4 Reference Directives

- SECNAVINST 5000.36, “Department of the Navy Data Management and Interoperability”
- DoD Directive 4630.5, “Interoperability and Supportability of Information Technology (IT) and National Security Systems (NSS)”

- DoD Instruction 4630.8, ‘Procedures for Interoperability and Supportability of Information Technology”
- DoD Instruction 8500.2, “Information Assurance”
- DoD Instruction5200.40, ”Department of Defense Information Technology Security Certification and Accreditation Process”
- SECNAVINST 5239.3, “Department of the Navy Information Systems Security (INFOSEC)”

5.3.8 Facilities

5.3.8.1 Introduction

The facilities element includes the facilities needed to operate and maintain a system, and any training buildings or ranges, depot facilities, storage facilities (including secure storage and ammunition storage), and housing facilities for personnel required to support the system, and utilities associated with all of the facilities. Facilities’ planning is the process of translating assigned missions, tasks, and functions into facilities requirements and then comparing requirements with assets to identify deficiencies or excesses. Facilities planning must also include plans to correct the deficiencies and excesses. The time period to program facilities is lengthy (normally 5 to 7 years). Funding is provided through the Military Construction (MILCON) appropriation.

5.3.8.2 Process

There are very few changes that can be made within expeditionary programs in terms of people, equipment, organization, and missions that do not have an impact on facilities. Lack of proper planning often results in adverse conditions when these changes are made without facilities in place. Planning must begin very early if facilities are to be provided in a timely manner. The NEPO APML must determine the facilities requirements for new weapon systems/equipment and assess the impact on the existing facilities. If new or modified facilities are required, the additional requirements must be added to the appropriate activities Facilities Support Requirements (FSR) planning document. Modifications to the FSR must be submitted to the NEPO PM. The activity (installation or base) that requires new or changed facilities will then submit a MILCON project. This project will compete for funding with other construction projects throughout the Navy. The only other course of action to program for the facility requirements is to include the requirements as part of the system acquisition buy in the initial POM process.

5.3.8.3 Responsibilities

- When required, the APML will designate a Facilities LEM who is responsible for providing technical guidance and/or support to the program office on facilities, budget, and data requirements; for ensuring facilities are adequately addressed in all requirements documents and specifications; and for developing and publishing the FSR. NEPO will initiate contact with the installation affected and provide all necessary information to support facility construction or modification.

- The installation that requires new or changed facilities in order to field a system is responsible for developing and submitting a MILCON project to acquire or change the facilities.

5.3.8.4 Reference Directives

- OPNAVINST 11010.20, “Facilities Project Instruction”
- NAVFAC P-80, “Facility Planning Factor Criteria for Navy and Marine Corps Shore Installations”

5.3.9 Packaging, Handling, Storage, and Transportation (PHS&T)

5.3.9.1 Packaging, Handling and Storage

5.3.9.1.1 Introduction

Packaging, Handling, and Storage (PHS) is the process to ensure that the system and support items are adequately protected from the environmental hazards to which they will be exposed while in transit and during storage prior to their use. Through PHS, any special handling equipment and/or procedures are identified, acquired or developed, fielded, and any special storage requirements are identified and implemented. PHS also includes such issues as decontamination, environmental controls, and disposal of packaging materiel.

5.3.9.1.2 Process

PHS concepts and constraints must be defined early in the acquisition process and incorporated into the system design. Acquisition planning must ensure that any slings, fixtures, or other special handling equipment can be acquired and supplied in a timely manner. As maintenance concepts and equipment design are defined, planning for storage begins. This planning includes identifying and specifying the storage environment, the space requirements, the special handling equipment required during storage, preservation and packing requirements for each item to be delivered under the contract, and the periodic maintenance required at each maintenance level. The specific PHS requirements should be identified in the hardware contractor's packaging management plan.

5.3.9.1.3 Responsibilities

- The NEPO APML is responsible for NAVFAC PHS policy for expeditionary equipment.

- When required, a PHS LEM will be designated by the APML who is responsible for providing technical guidance and/or support to the PM on those matters, and for ensuring PHS is adequately addressed in all requirements documents and specifications.

5.3.9.1.4 Reference Directives.

- MIL-STD- 2073-1E, “DoD Standard Practice for Military Packaging”
- MIL-STD-130N, “DoD Standard Practice Identification Marking of U.S. Military Property”

5.3.9.2 Transportation

5.3.9.2.1 Introduction

Transportation can be defined as the means by which the equipment is moved or conveyed. Transportation can be classified into three general modes: land, water, and air. Each of these modes can be further defined by the various types of transport (such as truck, barge, aircraft, etc.). DoD policy requires that systems and equipment be of such gross weight and dimensions that they can be handled and moved by existing or planned commercial and/or military transportation assets. Transportability of equipment by required transport modes will be verified by test, analysis, or analogy before the equipment is procured, with safety being a primary transportability objective. The most commonly used modes of transportation for the military are rail, highway, water, air, and pipeline. Rail transportation is an excellent means for mass movement of heavy materiel that can reach most areas of the country. Items must be packaged and braced to resist the shock of "bumping" at freight yards, sudden stops and starts, and vibration during shipment. Since all shippers and receivers do not have railheads, additional handling at the rail terminal is usually required. Items may be utilized or positioned in strategic locations in the Continental United States (CONUS) or outside CONUS (OCONUS) locations. Transportation of needed items assures that our CONUS installations and forward deployed units are provided with proper supply levels. Replenishment actions, such as depot level maintenance, depend on transportation to move equipment/items from field sites to repair sites. New systems/equipment, ammunition, and personnel all rely on various modes of transportation to ensure positioning in locations where they are needed.

5.3.9.2.2 Process

Transportation planning must ensure that the planned mode(s) of transportation are in conformance with program schedules and priorities. This planning must also ensure that other requirements such as preservation, packing, marking, shipping dimensions, hazard precautions, and security considerations are developed in accordance with the planned mode of transportation and any secondary or emergency modes that may apply.

5.3.9.2.3 Responsibilities

- NAVFAC APML is responsible for transportation budgeting for expeditionary programs.

- ISEAs will designate a Transportation LEM who is responsible for providing technical guidance and/or support to the NEPO/ PMs on transportation, and data requirements, and is responsible for ensuring transportation is adequately addressed in all requirements documents and specifications.

- NEPO APML will ensure that transportation requirements and constraints are included in the appropriate acquisition and logistics documents and initial transportation funding requirements are included in the program's POM and budgets.

5.3.9.2.4 Reference Directives

- DoD 4500.9R, “Defense Transportation Regulation”
- DoD Directive 4500-9E, “Transportation and Traffic Management of September 11, 2007”

5.3.10 Design Interface

5.3.10.1 Reliability, Maintainability, and Supportability (RMS)

5.3.10.1.1 Introduction

Early in a system's life cycle, design influence is the means to ensure that the system is developed (or in the case of a COTS/NDI, selected) to reduce the logistics burden on the expeditionary forces while at the same time meeting the critical performance characteristics. RMS is a measure of system effectiveness. As part of the systems engineering process, all facets of equipment performance must be evaluated with respect to each other and system cost. RMS is one of the elements which undergo this tradeoff process. The resulting RMS requirements will influence or drive the design of the equipment. The RMS requirements and the effectiveness of the design in meeting those requirements will impact other analytical tools. The reliability of the system will have a direct effect on logistics support elements such as supply support, support equipment, maintenance planning, and manpower planning.

- Reliability is a fundamental characteristic of a system expressed as the probability that the system will perform its intended function for a specified period of time under actual operational conditions. Reliability is normally stated in terms of Mean Time Between Failure (MTBF) (e.g., miles, operating hours, rounds, etc.).

- Maintainability is normally specified in terms of Mean Time To Repair (MTTR), and other indices, such as Maintenance Man Hours per Operating Hour (MMHOH) and Mean Logistics Delay Time (MLDT). It provides a measure of the ability of an item to be retained in or restored to specific conditions when maintenance is performed by personnel having specified skill levels, using prescribed procedures and resources at prescribed echelons of maintenance and repair.

- Supportability relates to the degree to which a system can be supported, both in terms of the inherent design characteristics of the prime mission-oriented components of the system and characteristics of the various elements of support (e.g. test equipment, supply support, etc.). It pertains to such characteristics as standardization, interchangeability, accessibility, diagnostics, compatibility among the elements of logistic support, and so on. The term is often used in a

broad context, but does generally relate to the design characteristics of a system and there is some degree of overlap with other design characteristics such as reliability and maintainability.

5.3.10.1.2 Process

There are three major RMS taskings for acquisitions: definition, design, and evaluation. Definition of RMS begins with the development of mission requirements and mission profiles. The initial RMS thresholds and goals are put into the system capabilities or procurement documents. Based upon the mission profile, quantitative and qualitative RMS requirements are developed. These requirements are then used by the design activity to further describe the equipment's design. Reliability and maintainability models and predictions are used to evaluate equipment potential during the interactive design process. As reliability and maintainability weaknesses are identified in the design, they are analyzed and the equipment is further redesigned. As the design is refined, the activities assigned to perform development and Test and Evaluation (T&E) confirm that the requirements have been met and/or identify any remaining deficiencies. After fielding, Product Quality Deficiency Reports (PQDR) (SF368) will be submitted on premature equipment failures and on warranted items. The monitoring of actual system reliability and maintainability will be used as the basis for determination of new system reliability and maintainability.

5.3.10.1.3 Responsibilities

- ISEAs will designate a RMS LEM and are responsible for providing technical guidance and/or support to NEPO/ PM on RMS issues, and for monitoring the reliability and maintainability performance of WS/E.
- NEPO APML is responsible for developing specific RMS requirements in conjunction with the PM.
- NEPO/ PMs are responsible for publishing capabilities and procurement documents which are the source document for RMS performance requirements.
- The development test activity (normally the development contractor) is responsible for evaluating RMS performance during development testing.
- The operational test activity is responsible for evaluating RMS performance during operational testing.
- NAVFAC ELC N43 will act as the PQDR screening point, and the system ISEA will act as the PQDR action point.
- NAVFAC ELC N43 is responsible for monitoring fleet feedback to identify RMS trends and initiate corrective action in coordination with ISEAs and the TYCOM.

5.3.10.1.4 Reference Directive

- “DoD Guide for Achieving Reliability, Availability and Maintainability”

5.3.10.2 Environmental, Safety, and Occupational Health (ESOH)

5.3.10.2.1 Introduction

ESOH is the application of engineering and management principles, criteria and techniques to optimize ESOH within the constraints of operational effectiveness, time, and cost throughout all phases of the system life cycle.

5.3.10.2.2 Process

ESOH analysis is conducted for each system acquisition to integrate ESOH issues in the system engineering process. The ESOH analysis contains the following elements:

- National Environmental Policy Act.
- Environmental Compliance.
- System Safety and Health.
- Hazardous Materiel (HAZMAT).
- Pollution Prevention.

5.3.10.2.3 Responsibilities

- NEPO APML is responsible for establishing ESOH criteria for expeditionary programs. The APML, when required, will designate an ESOH engineering LEM who is responsible for providing technical guidance and/or support to the PM, and for developing and monitoring the system safety programs.

- The NEPO/ PMs are responsible for ensuring ESOH goals and objectives are met for each acquisition and including them in the acquisition/logistics documents. The PM is required to obtain a safety release prior to conducting any tests involving personnel as well as a safety certification prior to issuing any equipment to the warfighter.

5.3.10.2.4 Reference Directives

- DoD Directive 4715.1E, “Environment, Safety, and Occupational Health (ESOH)”

5.3.10.3 Electromagnetic Environmental Effects Control Program (E3CP)

5.3.10.3.1 Introduction

The electromagnetic environment in which military systems must operate is created by a multitude of sources. Primary contributors are intentional, unintentional, friendly, and hostile emitters. Electromagnetic pulses, atmospheric, solar and galactic emissions, lightning, and the like, are some of the other sources. The contribution of each emitter to the environment may be described in terms of its technical characteristics, such as power, modulation, frequency, bandwidth and so forth. Effects depend on the receiver's characteristics, relative locations of emitters and receptors, operational concepts, and so forth. Electromagnetic effects can adversely

affect all electronic electro-optical, electrical and electromechanical equipment and systems, personnel, fuels, and weapons. The E3CP has three major objectives.

- Identify and assess E_3 problems for expeditionary programs.
- Assist the TYCOM in correcting existing E_3 problems.
- Assist acquisition managers in controlling E_3 in new equipment.

5.3.10.3.2 Process

The E3CP begins early in the acquisition cycle and is to be applied by procuring agencies and by development and operations activities at appropriate times during the life cycle of the system. E3CP is applied to any system which can be susceptible to electromagnetic energy. Electromagnetic Compatibility (EMC) is the ability of a system or equipment to operate within design tolerances in its intended environment, with adjacent systems and equipment, and/or by itself. EMC can be achieved through proper design, development, test and production methods, accepted installation practices and life cycle maintenance and support. To be effective, the design methodology must provide a clearly defined, coherent approach for preventing electromagnetic problems and for achieving the required EMC. Normally, EMC will not be attained unless these aspects are emphasized by management in an EMC program established early in the conceptual and design phases of equipment and WS/E.

5.3.10.3.3 Responsibilities

- NEPO APML
  - Ensures that E3 preventive measures are addressed in capabilities and procurement documents.
  - Ensures translation of E3 requirements into appropriate SOWs and/or Equipment Specifications for Engineering and Manufacturing Development and Production contracts.
  - Ensures that a waiver accompanies any deviation from E3 preventive measures.
  - Provides overall E3 program leadership, guidance, direction and coordination.
  - Budgets for technical support of the E3 program.
  - Interfaces with other DoD agencies on E3 matters.
  - Recommends procurement of appropriate test equipment for effective E3 control.
  - Ensures translation of E_3 requirements into training standards for training of all operators, repairers and supervisors of communications-electronic systems.

- ISEA
  - Provides technical management of the program and technical assistance to NEPO/ PMs in ensuring that electromagnetic environmental effects are considered in equipment acquisitions and modifications.
  - Provides technical assistance to NEPO/ PMs and expeditionary forces in the identification and acquisition of test, measurement, and diagnostic equipment (TMDE) to be used for E3 control.

- Ensures proper E3 control procedures are used in all depot repair/rebuild activities.

5.3.10.3.4 Reference Directives

- DoD Directive 3222.3, “DoD Electromagnetic Environmental Effects (E3) Program”
- DoD 4000.25-13-M, “Logistics Data Element Standardization and Management Program Procedures”

5.4 Related Supportability Disciplines

In addition to acquiring and integrating the principal logistics functional areas, the related disciplines described in the following paragraphs of this chapter must also be integrated to develop a complete logistics program.

5.4.1 Warranty

5.4.1.1 Introduction

- Methods of applying warranties are covered in Federal Acquisition Regulations (FAR) clauses, and the DoD and SECNAV instructions. NAVFAC typically applies warranty FAR clauses on all contracts. The methods and types of warranty should be referenced and considered part of all maintenance planning initiatives. This information is documented in the ULSS.

- The Defense Procurement Reform Act of 1985 (Public Law 98-525) added Section 2403 to Title 10 of United States Code. This section requires the DoD to obtain warranties in contracts for weapon systems awarded after 1 January 1985. Weapon systems are defined as "items that can be used directly by the Armed Forces to carry out combat missions and cost more than $100,000 or for which the eventual total procurement cost is more than $10,000,000." Only support equipment (e.g. ground handling equipment), training devices, ammunition, and commercial items are specifically excluded. The law requires that the following specific types of guarantees be provided:
  - Design and manufacturing requirement warranties, which provide assurance that the product is designed and built as specified.
  - Warranties against defects in materiel and workmanship, which are specifically designed to correct latent defects and ensure preventive actions are taken by manufacturers.
  - Warranties which ensure conformance to essential performance requirements where performance is determined by measuring field reliability and/or maintainability over a period of time. These measurements must be performed in conjunction with a comparison of actual value verses guaranteed value.

- For NAVFAC, warranties will generally be of two types: a performance assurance warranty in which the primary intent is to assure that minimum design, quality, and

performance levels stated in the contract are achieved; or a failure-free warranty that requires a period of failure-free usage. The performance assurance warranty is preferred in most cases although failure-free warranties may be appropriate in acquisitions where an item's reliability is unknown or unspecified (particularly in the case of COTS and NDI).

- The law allows for a waiver for all or part of the coverage requirements of the statute. The PM should request waivers from the Assistant Secretary of the Navy Research Development and Acquisition (ASN RD&A) for warranties on weapon systems and equipment when the proposed warranty is not cost-effective or not in the best interest of the Government. Defense Federal Acquisition Regulation (DFAR) Subpart 46.7 requires that a warranty cost-benefit analysis be conducted and documented in the contract file.

5.4.1.2 Process

The function of a warranty is to provide the Government with a remedy for a breach of contract by the contractor. A breach is the contractor's failure to meet the requirements of the contract. NEPO APML strictly forbids using warranties as a substitute for adequate and timely logistics support planning. Warranties are very expensive to acquire and enforce. Warranties increase the unit price, inhibit competition, add a tremendous administrative burden to the operators and maintainers of the system, increase life cycle costs for the system, and can decrease readiness due to lengthy downtime of equipment.

5.4.1.3 Responsibilities

- NEPO APML is responsible for:
  - Issuing policy guidance and providing periodic training for the technical and statutory requirements of warranties for NEPO acquired items.
  - Designating Warranty Administrators for expeditionary programs.

- ISEAs are responsible for:
  - Serving as the warranty LEM.
  - Assisting PMs in preparation and tailoring of warranty clauses and requirements.
  - Promulgating warranty information to the field via the ULSS.
  - Serving as the warranty coordinator.
  - Developing SOW and CDRL for collection of warranty costs.
  - Serving as the PQDR Action Point.
  - Developing contract warranty requirements.

- When warranted equipment fails all users of warranted equipment are responsible for processing PQDRs through the designated PQDR Screening Point.

- All Warranty Coordinators are responsible for processing Warranty PQDRs received from the PQDR Screening Point.

5.4.1.4 Reference Directives

- Title 10 U.S.C. 2403
- FAR Subpart 46.7
- "Defense System Management College (DSMC) Warranty Guidebook"

5.4.2 Weapon System Support Program (WSSP)

5.4.2.1 Introduction

The WSSP is a DLA administered program which applies special management attention to specific service-designated programs. This program is applicable to common class IX consumable repair parts managed by the DLA Supply Centers. The overall purpose of the WSSP is to enhance the readiness and sustainability of the military services by providing the maximum practical level of support for designated DLA managed items with system application.

5.4.2.2 Process

Expeditionary programs will participate in the WSSP to the fullest extent possible since the WSSP ensures a high level of logistics support for the most essential consumable items. This joint effort between the NAVFAC and the DLA concentrates on three major areas:

- Consolidated logistics planning for the end item and repair parts.
- Selection of WS/E to be included in the WSSP.
- Identifying all DLA-managed items having applicability to the selected WS/E.

5.4.2.3 Responsibilities

- NEPO APML is responsible for assigning weapon system codes to all systems entering the inventory.
- NEPO APML is responsible for soliciting DLA support on IPTs and other program review/planning actions. This effort should be coordinated through the DLA Liaison Officer.
- NAVFAC ELC N43 is the focal point for coordinating with the DLA on matters related to the WSSP.
- The PSICP provides technical assistance, materiel readiness and operational readiness interface with DLA.

5.4.2.4 Reference Directives

- DLAR 4140.38, "DLA Weapon System Support Program"

5.4.3 Configuration Management (CM)

5.4.3.1 Introduction

CM is a process by which system and equipment configuration baselines are established, controlled and maintained. CM provides appropriate and accurate documentation in support of ILS functions and operations. The CM process is a joint effort between the design and/or production contractor, Program Offices and ISEAs. Detailed coverage of this logistics related element is contained in the NAVSEA PMs Configuration Management (CM) Handbook.

5.4.3.2 Process

- CM is implemented early in the development cycle and continues throughout the system life cycle in order to:
    - Identify, document and verify the functional and physical characteristics of a configuration item.
    - Control changes to an item and its documentation.
    - Record the configuration of actual items.
    - Audit the configuration item and its configuration identification.

- The four basic elements of CM are Configuration Identification, Configuration Status Accounting (CSA), Configuration Control, and Configuration Audits.
    - Configuration identification includes the selection of Configuration Items (CIs); the determination of the types of configuration documentation required for each CI; the issuance of numbers and other identifiers affixed to the CIs and to the technical documentation that defines the CIs configuration, including internal and external interfaces; the release of CIs and their associated configuration documentation; and the establishment of configuration baselines for CIs.
    - CSA is the recording and reporting of information needed to manage configuration items effectively, including:
        - A record of the approved configuration documentation and identification numbers.
        - The status of proposed changes, deviations, and waivers to the configuration.
        - The status of approved changes.
        - The configuration of all units of the configuration item in the operational inventory.
    - Configuration Control establishes procedures for the control and identification of all changes to an established configuration baseline (hardware and software).
    - Configuration Audits are conducted to:
        - Ensure that all operational, environmental and interface requirements of the system and equipment have been demonstrated and validated, meeting stated required operational capabilities and specification requirements.

- Ensure that the "as-built" hardware dimensional and physical characteristics, as well as executable software, meet the requirements of the technical engineering drawings and specifications.

5.4.3.3 Responsibilities

- NEPO APML is responsible for CM policy for expeditionary equipment procured by NAVFAC.

- ISEAs
  - Designate CM LEM and is responsible for providing the technical guidance to the NEPO/ PMs in the areas of configuration identification, control, and audit.
  - Serve as CCB Secretariat for supported programs.
  - Serve as CSA LEM and is responsible for providing technical guidance on CSA requirements.
  - Provide all CM-related requirements for expeditionary acquisition programs.

- SSA
  - Provide software related configuration management support.

5.4.3.4 Reference Directives

- MIL-HDBK-61A, "Configuration Management Guidance"
- SL720-AA-MAN-010, "Configuration Management, Fleet Modernization Program (FMP), Section 8"
- "NAVFAC ELC N43 Configuration Management Handbook"

5.4.4 Configuration Data Management

5.4.4.1 Introduction

Ships Configuration and Logistics Support Information System (SCLSIS) encompasses the automated data processing system for identifying configuration worthy assets' status accounting posture using the Configuration Data Managers Database – Open Architecture (CDMD-OA). An asset is considered configuration worthy if it requires one of the following logistical support elements: supply support, test equipment, technical manuals, repair standards, PMS or intermediate/depot maintenance. The Navy's ability to efficiently plan and perform maintenance and accomplish alterations support depends upon the integrity of configuration data. The SCLSIS database is the only single authoritative source of information regarding ship/shore component configuration status. Activities use SCLSIS to retrieve configuration, maintenance and alteration data rather than rely on their own configuration files. Naval Sea Systems Command (NAVSEA) is designated as the Configuration Data Management authority to control the SCLSIS database's accuracy and completeness.

5.4.4.2 Process

The CDM is involved in two distinct phases within the SCLSIS process: Initialization and Maintenance. Initialization is the transition of new unit's assets into the SCLSIS database. It is defined by requirements leading to establishing a unit SCLSIS file. The concept is developed to ensure the required data relationships are initially inputted into SCLSIS. SCLSIS is the Navy's central repository for configuration and logistics support data directly linked to the Weapons system file (WSF), Naval Inventory Control Point (NAVICP). The WSF data provides ships/sites authorized allowances and supply support. The maintenance phase is defined by managing the ships/sites' configuration data via SCLSIS. Maintenance is accomplished throughout the asset's entire life cycle.

5.4.4.3 Responsibilities

The CDM is responsible for maintaining CSA data for equipment at sea and ashore. Each activity has a designated CDM. Configuration managers validate equipment currently recorded in the CDMD-OA as well as the inventory of the unit assets against the required TOA. This entails serial number identification and tracking to insure both the CDMD-OA and MICRO-Shipboard/Shore Non-tactical Automated Data Processing System (SNAP) systems are kept current. The designated CDM will:

- Establish and maintain SCLSIS Management Plan.
- Be certified by NAVSEA authority IAW NAVSEA 9090-700 series.
- Process and validate all configuration change data, file corrections and logistics support data. Improve SCLSIS and SNAP database's integrity, quality and accuracy.
- Support configuration change reporting, file correction and logistics support data updates initiated by organizations, units, and ISEAs and Planning Yards (PY).
- Correct CDMD-Open Architecture (OA)'s inaccurate information for ship/shore locations.
- Develop and assign Hierarchical Structure Codes (HSC) for combining functionally related equipment into the SCLSIS database.
- Develop Configuration Overhaul Planning (COP) files for Fiscal Year buy plans, Ship Alterations (SHIPALTS) and disposal.
- Accomplish desktop CDM review using CDMD-OA database reconciliation (DBR) comparison program.
- Interface with NAVICP to scheduling E-52 draw downs. The product is loaded into SNAP for generating a unit's COSAL.

5.4.4.4 References

Expeditionary CDMs shall utilize methods established in accordance with existing DoD and Navy standards, regulations and instructions. These policies and guides provide roadmaps to establishing and maintaining control of asset configurations.

- S0752-AA-SPN-010, "NAVSEA Technical Specification 9090-700 Series, Ship Configuration and Logistics Support Information System (SCLSIS)"

- SL720-AA-MAN-010, “Configuration Management, Fleet Modernization Program (FMP), Section 8”
- NAVSEA Tech Spec 9090-310D, “Alterations to Ships Accomplished by Alteration Installation Teams”
- NAVICPINST 4441.170A, “Coordinated Shipboard allowance List (COSAL) Use and Maintenance Manual”
- NAVSEA INSTR 4790.8B, “Ship’s Maintenance and Materiel Management (3M) Manual”
- “CDM Personnel Qualification Standards (PQS) Training Program”
- N40-991001-01, “CDMD-OA Desk Guide”
- “NAVFAC ELC Internal Working Procedures: CDM 001 through CDM-011”

5.4.5 Table of Allowance (TOA) and Advanced Base Functional Component (ABFC) Management

5.4.5.1 Introduction

The TOA is a complete listing of Chief of Naval Operations (CNO) approved equipment and materiel authorized as allowance for a specific unit. Advanced Base Functional Components (ABFC) is a grouping of personnel, facilities, equipment, and materiel designated to perform a specific CNO approved expeditionary mission.

5.4.5.2 Process

The TOA and ABFC Management process is prescribed in NAVFACINST 4423.1H.

5.4.5.3 Responsibilities

- NAVFAC ELC is responsible to develop, modify, and document all Navy TOA listings, development of ABFC designs and Type Unit Characteristics (TUCHA) data submission.

- Expeditionary Units are responsible to submit the Unit’s mission statement and ROC/POE, Navy Mission Essential Task Lists (NMETLs) that support the unit’s operational requirements.

- The OPNAV Resource Sponsor reviews and approves the TOA and coordinates with NAVFAC, and other Navy SYSCOMs, to program funding to build, re-capitalize and modernize the TOA.

- NAVFAC ELC will, in conjunction with the NEPO and TYCOM, develop buy plans and fielding plans to outfit approved TOAs.

5.4.5.4 Reference Directives

- OPNAVINST 4040.39B

- OPNAV 41P3 Series
- NAVFACINST 4423.1H, "Navy Table of Allowance (TOA) and Advanced Base Functional Components (ABFC) Management, Development and Revision Instruction"

5.4.6 Diminishing Manufacturing Sources and Materiel Shortages (DMSMS)

5.4.6.1 Introduction

DMSMS is the loss, or impending loss, of manufacturers of items or suppliers of items or raw materiel. The military loses a manufacturer when that manufacturer discontinues (or plans to discontinue) production of needed components or raw materiel. This situation may cause materiel shortages that endanger the life cycle support and capability of the weapon system or equipment. The net effect is that very often programs may need to conduct analysis to ensure spares inventory meets unit readiness objectives and where necessary, alternate sources are developed or systems are modernized.

5.4.6.2 Process

Detailed guidance for establishing and managing a DMSMS program is provided in the DoD DMSMS Guidebook referenced below. At a minimum, an effective DMSMS process is aimed at the following objectives:

- Ensures that all parts and materiel to produce or repair the platform are available.
- Reduces, or controls, Total Ownership Cost (TOC).
- Eliminates, or at least minimizes, reactive DMSMS actions.
- Evaluates design alternatives.
- Provides for risk mitigation as it applies to DMSMS.
- Evaluates more than one approach to resolve DMSMS issues.
- Collects metrics to monitor process effectiveness.

5.4.6.3 Responsibilities

- NEPO APML will establish and support DMSMS programs as required

5.4.6.4 Reference Directives

- SD-22 Diminishing Manufacturing Sources and Materiel Shortages (DMSMS) Guidebook

5.4.7 Item Unique Identification

5.4.7.1 Introduction

Item Unique Identification, or IUID, is a capability that requires a globally unique identifier for items, along with the ability to consistently and accurately distinguish any item

from another, by using high capacity machine readable 3-D marking. The unique identifier distinguishes not only dissimilar items but also identifies specific items that have the same manufacturer part number and NSN. The NSN is valuable and critical for consumable items however, for Department of Defense, serially managed assets; IUID provides permanent lifetime item uniqueness.

5.4.7.2 Process

Detailed guidance for establishing and managing an IUID program is provided in the MILSTANDARD 130N and DFARS 211.274-2 referenced below. The primary objectives for a IUID program are: integration of item data, as envisioned by the DoD Financial Management Enterprise Architecture (FMEA), to include improved data quality and global interoperability and rationalization of systems and infrastructure; improved item management and accountability; improved asset visibility and life cycle management; and clean audit opinions on item portions of financial statements. Following are the guidelines to determine which materiel requires IUID:

- All delivered items where unit acquisition cost is $5,000 or more.

- Items less that $5,000 when identified by the requiring activity as serially managed, mission essential, or controlled inventory.

- Items less than $5,000 when the requiring activity determines that permanent identification is required.

- Regardless of value:
  - Any DoD serially managed subassembly, component, or part embedded within a delivered item.
  - The parent item that contains the embedded subassembly, component, or part.

- For new procurements, the IUID marking is required on all new contracts.

- For items in operational use, in inventory, and government property in possession of contractors, the following guidelines apply:
  - Item must qualify for IUID as stated above.
  - Requires innate serialized identity data to be previously marked on the item.
  - Virtual IUID, identifies an item until a trigger event occurs for physical marking. Trigger events include:
    - Change In Location - taken out of service at one place and moved to another to begin service.
    - Change In Status - taken out of service and placed in maintenance or returned to inventory.
    - Change In Program - shifted from control of one program to another.
    - Change In Accountability - moved from the custody of one organization to the custody of another.

5.4.7.3 Responsibilities

- Program Office (NEPO)
  - Develop policy for marking expeditionary equipment.
  - Determine equipment required to create the Return On Investment.
  - Coordinate budget requirements to support IUID Implementation.

- ISEAs
  - Identify items embedded in end items that require unique identification, including embedded subassemblies, components and parts. These embedded items will be identified in a Contract Data Requirements List (CDRL) or Exhibit.
  - Develop a plan for marking of legacy equipment.
  - Provide marking locations.

- Contracting Officers
  - Include the clause at 252.211-7003, Item Identification and Valuation, in all solicitations and contracts that require delivery of items.

5.4.7.4 Reference Directives

- Department of Defense (DoD) Instruction 5000.64, “Accountability and Management of DoD-Owned Equipment and Other Accountable Property”
- DoD Regulation 4140.1-R, "DoD Supply Chain Materiel Management Regulation"
- DFARS 211.274-2 “Policy for Item Unique Identification (IUID)”
- DoD MILSTD 130 N, “Department of Defense Standard Practice Identification Marking of U.S. Military Property”

Chapter 6
Materiel Fielding

6.1 Introduction

Materiel Fielding begins the transition from acquisition or an alteration modernization program to the operational support phase of a system's life cycle. It is the process through which a system is evaluated for fielding to the operating forces. Fielding assessments are made only for the first increment of capability fielded to the operating forces. Each new increment of capability will require a subsequent fielding assessment and process.

6.2 Purpose

The purpose of the Materiel Fielding process is to ensure systems are safe, operate as designed, and are logistically supported before being fielded. This includes ensuring ILS and funding issues have been resolved or provisions for their resolution have been made prior to IOC. This process provides a mechanism to monitor, control, and manage releases until a full release is achieved.

6.3 Applicability

The materiel release process is applicable to all NAVFAC expeditionary acquisition programs and initial or major software releases except for the following:

- Materiel procured with non-appropriated funds
- Individual combat clothing
- Supply class V
- Supply class VIII
- Follow-on procurements of systems whose physical and performance characteristics are unchanged
- Systems already in-service; except systems undergoing alteration or modernization

6.4 Policy

6.4.1 Conceptual Framework for Materiel Fielding

NEPO APML has established a formal Materiel Fielding process in order to ensure that only operationally suitable and logistically supportable materiel is released to the operating forces. The conceptual framework for this process is portrayed in Figure 6-1. Prior to Milestone C or at program initiation for COTS and NDI systems, the SYSCOM and TYCOM agree upon Materiel Fielding and IOC criteria. These criteria can either be program or logistics criteria and are the conditions that must be met prior to or concurrent with IOC. With respect to logistics, these criteria are typically those logistics products that are required to be in place prior to Materiel Fielding. The IOC must be supported by a PLR that documents program logistics status. PLRs are discussed in detail in Section 6.5. Systems remain under the control of NEPO until integration approval is granted and logistics support has transitioned. A system that has not met

full materiel release conditions may be prepositioned with the gaining command with the approval of NEPO and the TYCOM.

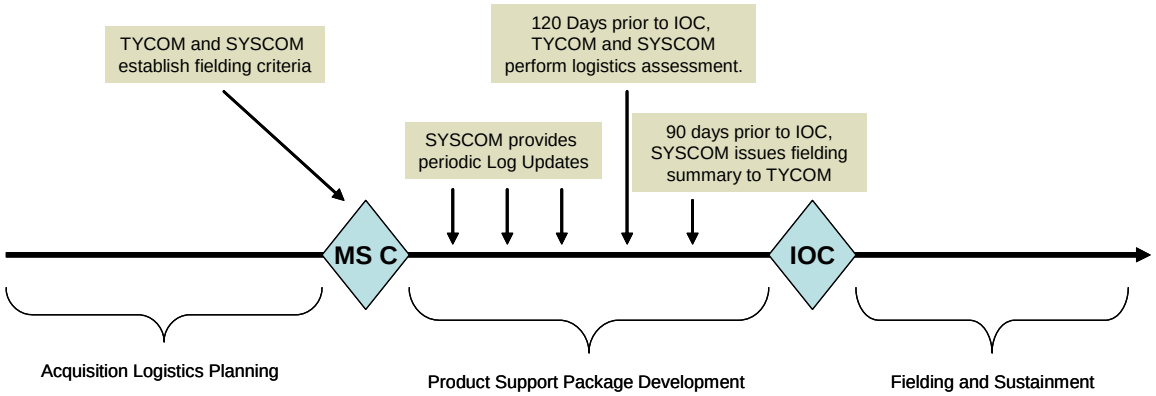

Figure 6-1 Conceptual Framework for Materiel Fielding

6.4.2 Types of Materiel Release

There are three categories of materiel release which permit fielding of a system. The three categories of releases are explained below.

6.4.2.1 Full Release

Full release indicates that the system has been deemed safe, fully supportable, and ready for fielding to all authorized organizations. A full release is authorized only when all of the following conditions are met:

- The system has been tested and evaluated and meets the requirements documented the system capabilities document.
- The TYCOM has concurred with supportability concepts and delivery schedules.
- All logistics support requirements have been met.
- The TYCOM concurs that the gaining commands are staffed and trained to operate and maintain the systems.
- The use of ICS in lieu of organic support or CLS will not preclude full release of the system.
- Approval for full release is authorized by the TYCOM.

6.4.2.2 Conditional Release

A conditional release indicates that one or more of the criteria above for a full release cannot be met; however, limited quantities of the system may be fielded due to a validated, urgent operational need.

- Approval for conditional release is granted by the TYCOM.
- The NEPO APML develops a corrective action plan for each condition that prevents a full release. The plan describes the circumstances of the release and specifies the projected completion date and the means of correcting any problems.

6.4.2.3 Training Release

A training release is the release of a system to formal schools or training activities for training purposes. A system designated for use by the operating forces in training exercises for field deployment must obtain a separate full or conditional release.

- Prior to approval for training release, the NEPO APML ensures that critical issues such as safety, availability of spare and/or repair parts, technical documentation, responsibility for maintenance support, and any other conditions that limit the use of the system are identified and accepted by the training organization.
- Approval for a training release is granted by the TYCOM based on concurrence from decision principals.

6.5 Materiel Release Procedures

6.5.1 Program Logistics Review (PLR)

NEPO APML is responsible for initiating a logistics assessment, ILA or PLR, at least 120 days (4 months) prior to IOC. The logistics assessment will document if the system will be ready for fielding at IOC. If other than a "Full Release" is anticipated, then NEPO APML will ensure that a corrective action plan is developed, published, and managed for each system affected.

6.5.2 Materiel Release and Fielding Status Report

NEPO APML issues the Materiel Release and Fielding Status Report on a quarterly basis by naval message, E-mail, or posting on the NECC, N43 portal page. These reports provide a forecast of systems scheduled for fielding and provide supporting logistics information. When it is anticipated that a program is within 90 days of fielding, it is included on the quarterly Materiel Release and Fielding Status Report. Only systems that are anticipated to be fielded within the report time frames are included. The report is provided to the TYCOM and NEPO. For those systems at IOC, the report will display the type of release and, if required, the POA&M to address all fielding requirement deficiencies.

6.5.3 Materiel Fielding Conference

Each quarter NEPO and the TYCOM will conduct a fielding conference. The purpose of these conferences is to establish fielding criteria, review upcoming fielding schedules, and identify and address any fielding issues that exist. Typically, the Materiel Release and Fielding Status Reports will be issued immediately after the Materiel Fielding Conferences.

6.5.4 Materiel Fielding IPT

NEPO may employ a Materiel Fielding IPT to assist in the fielding and deployment of the system. While not required for every system, Materiel Fielding IPTs are formed for complex, high density programs. NEPO will determine the need for a Materiel Fielding IPT and plan for funding for the facilities, equipment, tools and materiel needed for the task.

6.5.5 User's Logistics Support Summary (ULSS)

The ULSS will identify requirements for a Materiel Fielding IPT and will clearly describe the scope of assistance provided by the team. The ULSS template is provided in Appendix D.

6.5.6 Gaining Command Fielding Evaluation Report

The Gaining Command Fielding Evaluation Report will document all problems encountered, corrective actions taken, and lessons learned during the fielding. This report will also identify materiel and services still owed to the gaining command and list all discrepancy and deficiency reports initiated during the fielding. The completed final report will be submitted within 30 days of fielding by gaining commands to NAVFAC ELC. Appendix C provides a sample report.

6.6 Materiel Fielding Responsibilities

6.6.1 Program Office

NEPO APML is the responsible agent for fielding expeditionary systems. Duties include:

- Schedule and conduct fielding conferences.
- Coordinate Materiel Fielding location(s) and staging site(s) (if appropriate) with gaining command(s). Establish and provide instructions to the gaining command(s) and staging site(s).
- Develop and coordinate the Materiel Release and Fielding Status Report.
- Employ Materiel Fielding IPTs when required.
- Record draft lessons learned and initiate corrective actions to preclude recurrence of the problems in subsequent fielding.
- Correct documented shortages, discrepancies, or any problems reported by the gaining units. Track the status of discrepancies and deficiencies until the problem(s) is (are) corrected or the gaining unit no longer requires the support.
- Ensure warranty administration procedures are in place prior to system fielding.
- Coordinate the resolution of discrepancy reports (PQDRs, Supply Discrepancy Report (SDR), etc.).
- When a Materiel Fielding IPT is not used and the system is shipped to units via the supply system, then the NEPO will have the additional responsibilities to:

- Coordinate with gaining command(s) to ensure they are aware of shipments and delivery dates and that the gaining command(s) receipts for the system and reports assets in CDMD-OA.
- When requested by the APML, ensure that pre-shipment assembly, inspection, and tests are conducted; and direct the shipment of the system and/or support equipment to the appropriate gaining commands.

6.6.2 Gaining Commands

The gaining command's fielding responsibilities identified below should be established in the local Maintenance Management and Supply Standard Operating Procedures. The following responsibilities apply for the gaining command regardless of the method of fielding:

- Coordinate with the NEPO APML to ensure that the materiel, facilities, personnel, training requirements, and schedules required for fielding are known. Identify any unique installation support requirements.

- Participate in fielding conferences. Provide and fund for appropriate gaining command personnel to participate in the conferences.

- Provide all facilities, personnel, materiel, and administrative support agreed to during the fielding conferences.

- Establish accountability for all materiel received.

- Ensure a designated Communication Security (COMSEC) account is established to receive any needed classified COMSEC materiel.

- Perform unit level in processing, cleaning, unit marking, and servicing.

- Conduct a joint limited technical inspection with the providing Materiel Fielding IPT.

- Assign a central focal point to serve as the fielding and warranty coordinator.

- Additional responsibilities apply when a Materiel Fielding IPT is not used:
  - Perform all needed deprocessing, assembly, servicing, and marking required to place all systems into operation.
  - Process all required PQDRs, SDR, or warranty claims.

- The following additional responsibilities apply when a Materiel Fielding IPT is used and the system is delivered directly by the Materiel Fielding IPT.
  - Prior to arrival of the Materiel Fielding IPT, verify and coordinate the fielding schedules, locations, and all personnel and materiel support to be provided by the gaining command.
  - Post necessary receipt and other accounting documentation in accordance with published TYCOM supply and maintenance procedures.

Chapter 7
Program Logistics Reviews

7.1 Purpose

The purpose of this section is to provide guidance for logistics assessments of a system in support of acquisition and solicitation milestones and Materiel Fielding decisions. For programs that are managed within the normal Defense Acquisition Framework, the ILA requirements specified in SECNAVINST 4105.1 will be adhered to. For COTS/NDI programs that are defined as AAPs per SECNAVINST 5000.2, the procedures and requirements for the PLR described in this section will apply.

7.2 Periodic Logistics Reviews

The designated Program ILS IPT, in cooperation with the APML, reviews program scope, system complexity, fielding plan, and any other related factors in order to develop an integrated logistics support strategy including planning efforts for periodic reviews of the program. These periodic, informal reviews are scheduled to support program decisions and the ultimate fielding authorization. The purpose of these reviews is to determine if the requisite processes are in place to address logistics issues and to highlight any perceived risks at an early stage in the acquisition/solicitation cycle. The ILS Agent assigned to the program can schedule and conduct additional reviews as appropriate to address supportability issues as the program develops. At a minimum, a PLR shall be conducted 120 days prior to the scheduled IOC and in preparation for the materiel fielding decision.

7.3 Program Logistics Review (PLR)

The PLR is a technical analysis of all programmatic aspects which address or affect supportability, logistics, or readiness. The APML coordinates PLRs for all expeditionary acquisition programs where an ILA is not performed. The PLR assessments provide metrics to ensure that system engineering and logistics planning efforts are proceeding in accordance with expeditionary logistics policies and procedures and the established supportability strategy. They also identify problems which may affect achievement of supportability thresholds and objectives. A PLR is conducted prior to Milestone C or equivalent to support fielding decisions. PLR team leaders will participate in the preceding reviews in preparation for the PLR. This participation begins early in the program cycle and serves to involve the PLR team leader early on in the process. PLR assessments are generated by the APML at the conclusion of the PLR and forwarded to the TYCOM, documenting the adequacy of the system engineering and logistics posture of the system. It further certifies that the requisite support will be in place when the system is fielded. For software development initiatives, NAVFAC ELC N446, based on recommendations from the APML, will identify an independent SSA to assess the results of developmental and operational testing in order to evaluate post deployment supportability of the software.

7.4 PLR Team

The PLR is conducted by an assessment team composed of subject matter experts assigned to specific functional areas for review by the APML. The PLR Team Leader tailors the team membership to ensure an appropriate assessment of the system and equipment under review. The PLR team will use a detailed checklist, maintained by APML and separate from this instruction, as a guideline to ensure all logistically significant events, documents, and requirements are examined. Continuous interaction between the review team and APML is required to ensure timely progress of the assessment, and review of findings. In the case of joint program acquisitions, a joint PLR Team will be utilized when practical and membership is tailored accordingly. Determination of executing a joint PLR is endorsed during the pre-planning meetings with APMLs and clearly defined in the MOA with the other Service(s). To ensure APML and TYCOM requirements and supportability parameters are clearly defined, joint program documentation may be included.

7.5 PLR Process

The steps and timeline of the PLR process are summarized below. This process provides a typical snapshot of timelines and requirements. Each step can be tailored to meet program evaluation objectives. The process is tailored to meet non Acquisition Category (ACAT) program requirements typical of expeditionary systems and will use the Navy ILA Handbook as a guide.

- Annually, the NEPO APML will review expeditionary acquisitions and determine PLR requirements. An assessment of each program will be conducted and assessment requirements will be documented and published. NEPO APML will ensure that the annual review includes an assessment of the Future Year Defense Plan (FYDP) to ensure the timely identification and planning of future PLRs.

- NEPO APML will assign PLR Team Leaders and assign responsibilities for each team. PLR Team Leaders will typically be the ILS Lead/ Manager from expeditionary equipment programs.

- PLR Team Leaders will organize their teams and conduct PLR Planning meetings as required. These meetings will be scheduled as required and facilitate accomplishment of the PLR 120 days prior to IOC. Each PLR Team Leader determines the requirements included for each assessment and forwards them to the APML for approval. The PLR team leader will ensure that assessments include a review of required program documentation per the Navy ILA Handbook.

- PLR Announcement. NEPO APML will publish the PLR schedule for the Fiscal Year.

- PLR Review and Debrief. Appropriate program documentation and requirements, as well as those documents addressing supportability planning and implementation are evaluated. During the PLR, findings are generated. Preliminary findings are submitted to the APML for review prior to being submitted to the program ILS

Manager. Each finding presented to the ILS Manager will contain recommended corrective actions. The ILS Manager will then formally present the APML with all PLR findings and prepares a POA&M identifying the proposed resolution of findings. The PLR review report with the enclosed POA&M, as provided by the ILS Agent, is then forwarded to the APML with a recommended fielding decision.

- PLR Report. The final PLR report, as written by the ILS Agent and reviewed by the APML, is submitted to the TYCOM. The final package will include the approved POA&M and either a recommendation that the program continues into fielding, or that the program not proceed into the fielding schedule until the issues identified are resolved. The APML in concert with the TYCOM will make this determination based upon the substance and severity of the findings.

Appendix A
Acronyms

2M	Miniature/Microminiature
3M	Maintenance and Materiel Management

A

AAP	Abbreviated Acquisition Program
ABFC	Advanced Base Functional Component
ACAT	Acquisition Category
ACIP	Automated COSAL Improvement Program
ADM	Acquisition Decision Memorandum
AEL	Allowance Equipment List
AIS	Automated Information System
APL	Allowance Parts List
APM	Assistant Program Manager
APML	Assistant Program Manager Logistics
ASN RD&A	Assistant Secretary of Navy Research Development & Acquisition
ATE	Automated Test Equipment
ATS	Automated Test System
$A_{(a)}$	Achieved Availability
$A_{(i)}$	Inherent Availability
$A_{(o)}$	Operational Availability

B

BIT	Built In Test
BITE	Built In Test Equipment

C

CAE	Component Acquisition Executive
CALS	Continuous Acquisition and Life Cycle Support
CAR	Catalog Action Request
CBCPH	Construction Battalion Center, Port Hueneme
CCB	Configuration Control Board
CCR	Common Computer Resources
CDMD-OA	Configuration Data Manager Database– Open Architecture.
CDRL	Contract Data Requirements List
CESE	Civil Equipment Support Equipment
CI	Configuration Items
CIO	Chief Information Officer
CLS	Contractor Logistics Support
CM	Configuration Management
CMRS	Calibration & Measurement Requirements Summary

COMSEC	Communication Security
CONUS	Continental United States
COP	Configuration Overhaul Planning
COSAL	Coordinated Shipboard Allowance List
COTS	Commercial Off-The-Shelf
CSA	Configuration Status Accounting
CSCI	Computer Software Configuration Item
CSE	Common Support Equipment

D

DAB	Defense Acquisition Board
DAG	Defense Acquisition Guidebook
DBR	Data Base Reconciliation
DFA	Department of Finance & Administration
DFAR	Defense Federal Acquisition Regulation
DI	Developmental Item
DID	Data Item Description
DLA	Defense Logistics Agency
DMSMS	Diminishing Manufacturing Sources and Materiel Shortages
DoD	Department of Defense
DoDD	Department of Defense Directive
DoN	Department of the Navy
DRMO	Defense Reutilization and Marketing Office
DSMC	Defense System Management College
DMSMS	Diminishing Manufacturing Sources and Materiel Shortages

E

E_3CP	Electromagnetic Environmental Effects Control Program
EMC	Electromagnetic Compatibility
EMI	Electromagnetic Interference
E&MD	Engineering and Manufacturing Development
ESH	Environmental, Safety and Health
ESOH	Environment, Safety & Occupational Health

F

FAR	Federal Acquisition Regulation
FLIS	Federal Logistics Information System
FM	Functional Manager
FMEA	Failure Modes Effects Analysis
FRP	Full Rate Production
FSR	Facility Support Requirements

G

GFE	Government Furnished Equipment
GFI	Government Furnished Information
GPETE	General Purpose Electronic Test Equipment

H

HAZMAT	Hazardous Materiel
HSC	Hierarchical Structure Code
HSI	Human System Integration

I

ICP	Inventory Control Point
ICS	Interim Contractor Support
IETM	Interactive Electronic Technical Manuals
ILA	Independent Logistics Assessment
ILS	Integrated Logistics Support
IOC	Initial Operating Capability
IPT	Integrated Process Team
ISEA	In-Service Engineering Agent
IT	Information Technology

J

JETDS	Joint Electronic Type Designation System

L

LCC	Life Cycle Cost
LCL	Life Cycle Logistics
LEM	Logistics Element Manager
LMIS	Logistics Management Information System
LORA	Level of Repair Analysis
LOTS	Logistics Over the Shore
LOEP	List of Effective Pages
LSA	Logistics Support Analysis

M

MAIS	Major Automated Information System
MAISRC	MAIS Review Council
MCCR	Mission Critical Computer Resources
MDA	Milestone Decision Authority
MDAP	Major Defense Acquisition Program
METCAL	Metrology & Calibration

MILCON	Military Construction
MIL-HDBK	Military Handbook
MIL-SPEC	Military Specification
MIL-STD	Military Standard
MIP	Maintenance Index Pages
MLDT	Mean Logistics Delay Time
MMHOH	Maintenance Man Hours per Operating Hour
MOA	Memorandum Of Agreement
MRC	Maintenance Requirement Card
MSD	Materiel Support Date
MTBF	Mean Time Between Failures
MTP	Military Technical Publications
MTTR	Mean Time To Repair

N

NAVICP	Naval Inventory Control Point
NAVFACENGCOM	Naval Facilities Engineering Command
NAVFAC	Naval Facilities Engineering Command
NAVFAC ELC	Navy Facilities Expeditionary Logistics Center
NBG	Naval Beach Group
NBVC	Naval Base Ventura County
NDI	Non Developmental Item
NFELC	Navy Facilities Expeditionary Logistics Center
NECC	Navy Expeditionary Combat Command
NECE	Navy Expeditionary Combat Enterprise
NECF	Navy Expeditionary Combat Force
NEPO	NAVFAC Expeditionary Program Office
NIST	National Institute of Standards & Technology
NLL	Naval Logistics Library
NMETL	Navy Mission Essential Task List
NSN	National Stock Number
NSWC	Naval Surface Warfare Center
NTCSS	Naval Tactical Command Support System
NTSP	Navy Training System Plan

O

OEM	Original Equipment Manufacturer
OPNAVINST	Office of the Chief of Naval Operations Instructions
ORD	Operational Requirements Document
OSD	Office of the Secretary of Defense
OT	Operational Testing

P

PAFOS	Provisioning Allowance & Fitting Out Support
PBL	Performance Based Logistics
PDQR	Product Quality Deficiency Report
PEETE	Portable Electrical/Electronic Test Equipment
PEI	Principle End Item
PHS	Packaging, Handling and Storage
PHS&T	Packaging, Handling. Storage & Transportation
PICA	Primary Inventory Control Activity
PLR	Program Logistics Review
PM	Program Manager
PMS	Planned Maintenance Schedule
POA&M	Plan of Action and Milestones
POM	Program Objective Memorandum
PPBES	Programming, Planning, Budgeting & Executing Standards
PPS	Post Production Support
PQDR	Product Quality Deficiency Report
PQS	Personnel Qualification Standards
PR	Procurement Request
PS	Program Support
PSD	Program Support Documentation
PSE	Peculiar Support Equipment
PSICP	Program Support Inventory Control Point
PSL	Program Support Logistics
PSP	Product Support Package
PTD	Provisioning Technical Documentation
PY	Planning Yard

R

RMS	Reliability, Maintainability and Supportability
RCM	Reliability Centered Maintenance
RDC	Rapid Deployment Capability
RMS	Reliability Maintainability and Supportability
ROC/POE	Required Operational Capability/Projected Operational Environment

S

SCAT	Software Cost Analysis Tool
SCLSIS	Ship Configuration & Logistics Information System
SDR	Supply Deficiency Report
SE	Support Equipment
SECNAV	Secretary of Navy
SECNAVINST	Secretary of Navy Instruction
SHIPALT	Ship Alteration
SICA	Secondary Inventory Control Activity
SMA	System Materiel Availability
SM & R Code	Source Maintenance Recoverability Code

SNAP	Shipboard/Shore Non-Tactical Automated Data Processing System
SOW	Statement of Work
SPAWAR	Space and Naval Warfare Center
SPETE	Special Purpose Electronic Test Equipment
SPETERL	Ship/Shore Portable Electrical/Electronic Test Equipment Requirements List
SS LEM	Supply Support Logistic Element Manager
SSA	Software Support Activity
SSPO	Sealift Support Program Office
SYSCOM	System Command

T

TFBR	Technical Feedback Report
TLCSM	Total Life Cycle System Management
TM	Technical Manual
TMCR	Technical Manual Contract Requirement
TMDE	Test Measurement and Diagnostic Equipment
TMDEI	NAVSEA Test Measurement & Diagnostic Equipment Index
TMDER	Technical Manual Deficiency and Evaluation Report
TMMA	Technical Manual Maintenance Agent
TMMP	Technical Manual Management Program
TOA	Table Of Allowance
TOC	Total Ownership Cost
TRPPM	Training Planning Process Methodology
TSA	Technical Service Activity
TYCOM	Type Commander
TUCHA	Type Unit Characteristics
TUR	Test Uncertainty Ratio
T&E	Test & Evaluation

U

ULSS	Users Logistics Support Summary
USMC	United States Marine Corps

W

WS/E	Weapon System/Equipment
WSF	Weapon System File
WSM	Weapon System Manager
WSSP	Weapon System Support Program

Appendix B
Glossary of Terms

A

Acquisition Category (ACAT)

ACAT I programs are Major Defense Acquisition Programs (MDAPs). An MDAP is defined as a program estimated by the Under Secretary of Defense (Acquisition and Technology) (USD (A&T)) to require eventual expenditure for research, development, test and evaluation of more than $355 million (fiscal year (FY) 96 constant dollars) or procurement of more than $2.135 billion (FY96 constant dollars), or those designated by the USD (A&T) to be ACAT I. ACAT I programs have two sub-categories:

1. ACAT ID for which the Milestone Decision Authority (MDA) is USD (A&T).The "D" refers to the Defense Acquisition Board (DAB), which advises the USD (A&T) at major decision points.
2. ACAT IC for which the MDA is the DoD Component Head or, if delegated, the DoD Component Acquisition Executive (CAE). The "C" refers to Component.

ACAT IA programs are Major Automated Information Systems (MAISs). A MAIS is estimated by the Assistant Secretary of Defense for Command, Control, Communications and Intelligence (ASD (C3I)) to require program costs for any single year in excess of $30 million (FY96 constant dollars), total program in excess of $120 million (FY96 constant dollars), or total life cycle costs in excess of $360 million (FY96 constant dollars), or those designated by the ASD (C3I) to be ACAT IA. ACAT IA programs have two sub-categories:

1. ACAT IAM for which the MDA is the Office of the Secretary of Defense (OSD) Chief Information Officer (CIO) (formerly the senior IM Official, the ASD (C3I)). The "M" refers to Major Automated Information Systems Review Council (MAISRC).
2. ACAT IAC for which the MDA is the DoD Component Chief Information Officer (CIO) (formerly the Senior IM Official). The "C" refers to Component. The ASD (C3I) designates programs as ACAT IAM or ACAT IAC.

ACAT II programs are defined as those acquisition programs that do not meet the criteria for an ACAT I program, but do meet the criteria for a major system. A major system is defined as a program estimated by the DoD Component Head to require eventual expenditure for research, development, test, and evaluation of more than $135 million in FY96 constant dollars, or for procurement of more than $640 million in FY96 constant dollars, or those designated by the DoD Component Head to be ACAT II. The MDA is the DoD CAE.

ACAT III programs are defined as those acquisition programs that do not meet the criteria for an ACAT I, an ACAT IA, or an ACAT II. The MDA is designated by the CAE and shall be at the lowest appropriate level. This category includes a less-than-major AISs.

Acquisition Decision Memorandum (ADM) A memorandum signed by the milestone decision authority (MDA) that documents decisions made as the result of a milestone decision review or an in progress review.

Acquisition Logistics Technical and management activities to ensure supportability implications are considered early and throughout the acquisition process to minimize support costs and to provide the user with the resources to sustain the system in the field.

Acquisition Managers Persons responsible at different levels for some activity of developing, producing, and fielding a weapons system. Includes senior level managers responsible for ultimate decisions, program managers, and commodity or functional area managers.

Acquisition Program A directed and funded effort that is designated to provide a new, improved or continuing weapons system for automated information system capability in response to a validated operational need.

Acquisition Program Logistics Manager The designated Headquarters Supportability Manager responsible for developing and executing all SYSCOM Supportability Policy. Provides direct guidance to SYSCOM and Program Management Office personnel, and represents Supportability matters for the SYSCOM and to external SYSCOMs and NECC.
Automated Test Equipment (ATE) Any automated device used for express purpose of testing prime equipment; usually external to the prime device (e.g., support equipment).

B

Built-In Test Equipment (BITE) Any device permanently mounted in the prime equipment and used for the express purpose of testing the prime equipment, either independently or in association with external test equipment.

C

Continuous Acquisition and Life-Cycle Support (CALS) A core strategy to share integrated digital product data through a set of standards to achieve efficiencies in business and operational mission areas.

Commercial off the Shelf (COTS) COTS is a term applied when the government acquisition office following, a thorough analysis and risk trade off study, determines an item available within the commercial sector satisfies a materiel need for fleet user applications and deployment.

D

Developmental Test and Evaluation (DT&E) T&E conducted throughout the life cycle to identify potential operational and technological capabilities and limitations of the alternative concepts and design options being pursued; support the identification of cost-performance trade-offs by providing analyses of the capabilities and limitations of alternatives; support the identification and description of design technical risks; assess progress toward meeting critical operational issues, mitigation of acquisition technical risk, achievement of manufacturing

process requirements and system maturity; assess validity of assumptions and conclusions from analysis of alternatives; provide data and analysis in support of the decision to certify the system ready for operational test and evaluation; and in the case of automated information systems, support an information systems security certification prior to processing classified or sensitive data and ensure a standards conformance certification.

E

Electromagnetic Interference (EMI) Engineering term used to designate interference in a piece of electronic equipment caused by another piece of electronic or other equipment. Sometimes refers to interference caused by nuclear explosion.

Engineering and Manufacturing Development (E&MD) The third phase in the acquisition process, following Milestone II. The system and/or the equipment and the principal items necessary for its support are fully developed, engineered, designed, fabricated, tested and evaluated. The intended output is, as a minimum, a preproduction system which closely approximates the final product, the documentation necessary to enter the production phase, and the test results which demonstrate that the production product will meet stated requirements.

F

Federal Acquisition Regulation (FAR) The regulation for use by the federal executive agencies for acquisition of supplies and services with appropriated funds. The FAR is supplemented by the Military Departments and by the DoD. The DoD supplement is called the DFARS (Defense FAR Supplement).

G

Government Furnished Equipment (GFE) Equipment in the possession of or acquired directly by the government, and subsequently delivered to or otherwise made available to the contractor.

H

Human Systems Integration (HSI) A disciplined, unified and interactive approach to integrate human considerations into system design to improve total system performance and reduce cost of ownership. The major categories of human considerations are manpower, personnel, training, human factors engineering, safety and health.

I

Integrated Product Team (IPT) Team composed of representatives from all appropriate functional disciplines working together to build successful programs, identify and resolve issues, and make sound and timely recommendations to facilitate decision making.

L

Life cycle Cost (LCC) The total cost to the government of acquisition and ownership of a system over its useful life. It includes the cost of development, acquisition, operations and support (to include manpower), and when applicable, disposal.

Level of Repair Analysis (LORA) A trade study conducted by a contractor as part of the system and/or the equipment engineering analysis process. A basis on which to evolve an optimum approach to repair recommendations concurrent with the design and development process.

Low-Rate Initial Production (LRIP) The minimum number of systems (other than ships and satellites) to provide production representative articles for operational test and evaluation, to establish an initial production base, and to permit an orderly increase in the production rate sufficient to lead to full-rate production upon successful completion of operational testing. Major defense acquisition programs LRIP quantities in excess of 10 percent of the acquisition objective must be reported in the selected acquisition report. For ships and satellites LRIP is the minimum quantity and rate that preserves mobilization.

M

Major Defense Acquisition Program (MDAP) An acquisition program that is not a highly sensitive classified program (as determined by the Secretary of Defense) and that is designated by the Under Secretary of Defense (acquisition and Technology) as an MDAP, or estimated by the USD (A&T) to require an eventual total expenditure for research, development, test and evaluation of more than 355 million in fiscal year (FY) 96 constant dollars or for the procurement of more than 2.135 billion FY96 constant dollars.

Materiel (JP1-02) All items (including ships, tanks, self-propelled weapons, aircraft, etc., and related spares, repair parts, and support equipment, but excluding real property, installations, and utilities) necessary to equip, operate, maintain, and support military activities without distinction as to its application for administrative or combat purposes. See also equipment; personal property. Source: JP 4-0

Mean Time Between Failures (MTBF) For a particular interval, the total functional life of a population of an item divided by the total number of failures within the population. The definition holds for time, rounds, miles, events or other measures of life unit. A basic technical measure of reliability.

Mean Time To Repair (MTTR) The total elapsed time (clock hours) for corrective maintenance divided by the total number of corrective maintenance actions during a given period of time. A basic technical measure of maintainability.

Milestone (MS) The point when a recommendation is made and approval sought regarding starting or continuing (proceeding to the next phase) an acquisition program. Milestones are: 0 (Approval to conduct concept studies), I (Approval to begin a new acquisition program), II (Approval to enter engineering and manufacturing development) and III (Production or fielding development and operational support approval).

Mission Need Statement (MNS) A nonsystem specific statement of operational capability need prepared in accordance with the Chairman of the Joint Chiefs of Staff Memorandum of Policy 77. Developed by the DoD components and forwarded to the operational for validation and approval. Approved MNSs go to the milestone decision authority for a determination on whether or not to convene a Milestone 0 review.

N

Non-Developmental Item (NDI) A non-developmental item is any previously developed item of supply used exclusively for government purposes by a Federal Agency, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement; any item described above that requires only minor modifications or modifications of the type customarily available in the commercial marketplace in order to meet the requirements of the processing department or agency.

O

Operational Requirements Document (ORD) Documents the user's objectives and minimum acceptable requirements for operational performance of a proposed concept or system. Format is contained in Appendix II, DoDD 5000.2-R.

P

Packing, Handling, Storage and Transportation (PHS&T) The resources, processes, procedures, design considerations and methods to ensure all systems, equipment, and support items are preserved, packaged, handled and transported properly. This includes environmental considerations, equipment preservation requirements for short and long-term storage and transportability. One of the traditional logistic support elements.

Procurement Request (PR) Document which describes the required supplies or services so that a procurement can be initiated. Some procuring activities actually refer to the document by this title; others use different titles such as Procurement Directive. Combined with specifications, the statement of work and contract data requirements list (CDRL), it is called the PR Package, a basis for solicitation.

Program Definition and Risk Reduction (PDRR) The second phase in the acquisition process, following Milestone I. Consists of steps necessary to verify preliminary design and engineering, build prototypes, accomplish necessary planning, and fully analyze trade-off proposals. The objective is to validate the choice of alternatives and to provide the basis for determining whether to proceed into engineering and manufacturing development.

Program Objectives Memorandum (POM) An annual memorandum in prescribed format submitted to the Secretary of Defense by the DoD component heads which recommends the total resource requirements and programs within the parameters of SECDEF's fiscal guidance. A major document in the planning, programming and budgeting system; is the basis for the budget. The POM is the principal programming document which details how a component proposes to

respond to assignments in the defense planning guidance and satisfy its assigned functions of the future year's defense program. The POM shows programmed needs for 5 or 6 years hence and includes manpower, force levels, procurement, facilities, research and development.

R

Reliability, Availability and Maintainability (RAM) Requirement imposed on acquisition systems to ensure they are operationally ready for use when deeded, will successfully perform assigned functions, and can be economically operated and maintained within the scope of logistics concepts and policies. RAM programs are applicable to materiel systems; test measurement and diagnostic equipment, training devices; and facilities developed, produced, maintained, procured or modified for use.

S

Supply Support The process conducted to determine, acquire, catalog, receive, store, transfer, issue and dispose of secondary items necessary for the support of end items and support items. This includes provisioning for initial support as well as replenishment supply support. One of the traditional logistic support elements.

System Acquisition Process The sequence of acquisition activities starting from the agency's reconciliation of its mission needs, with its capabilities, priorities and resources, and extending through the introduction of a system into operational use of the otherwise successful achievement of program objectives.
Program Logistics Review The technical analysis of all programmatic aspects which address or affect safety, supportability, logistics or readiness.

T

Technical Support Agent The activity that assists the PM in defining, developing and funding for training requirements.

Test and Evaluation Master Plan (TEMP) Documents the overall structure and objectives of the test and evaluation program. It provides a framework within which to generate detailed T&E plans and it documents schedule and resource implications associated with the T&E program. The TEMP identifies the necessary developmental test and evaluation ,operational test and evaluation and livefire test and evaluation activities. It relates program schedule, test management strategy and structure, and required resources to: critical operational issues; critical technical parameters; objectives and thresholds documented in the ORD; evaluation criteria; and (5) milestone decision points. For multiservice or joint programs, a single integrated TEMP is required. Component-unique content requirements, particularly evaluation criteria associated with critical operational issues, can be addressed in a component-prepared annex to the basic TEMP.

Training and Training Support The processes, procedures, techniques, training devices, and equipment used to train civilian, active duty and reserve military personnel to operate and support a materiel system. This includes individual and crew training; new equipment training;

initial, formal, and on-the-job training; and logistic support planning for training for training equipment and training device acquisitions and installations. A traditional element of logistic support.

V

Value Engineering Value engineering is a functional analysis methodology that identifies and selects the best value alternative for designs, materiel, processes, systems, and program documentation. VE applies to hardware and software; development, production, and manufacturing; specifications, standards, contract requirements, and other acquisition program documentation; facilities design and construction; and management or organizational systems and processes to improve the resulting product.

W

Weapon Support and Logistic Research and Development Technology programs funded outside the weapon system development programs that may result in improved subsystem reliability and maintainability, improved support for the operation and maintenance of weapon systems, and improved logistics infrastructure elements.

Appendix C
Gaining Command Fielding Evaluation Report

The form provided below provides a basis for expeditionary units to evaluate and submit feedback for the materiel fielding process. Using this guide, expeditionary units are encouraged to evaluate applicable aspects of materiel fielding process at their command and provide feedback to NAVFAC ELC, N43. This process should be accomplished with 30 days of equipment fielding and submitted electronically to the Expeditionary Distance Support Desk at NAVFAC_ELC_EDSD@navy.mil.

GAINING COMMAND FIELDING EVALUATION REPORT		
SYSTEM NAME	SYSTEM MODEL #	ECC
GAINING UNIT	GAINING UNIT POC (PROVIDE CONTACT #)	FIELDING DATE

PRE-FIELDING COORDINATION			
ITEM	YES	NO	NA
1. Was the ULSS provided prior to fielding?			
2. Was your unit involved in the materiel fielding conference?			
3. Was your unit notified of the materiel fielding conference?			
4. Was the fielding delayed?			
5. If delayed, was the unit provided a POA&M?			
COMMENTS FOR CLARIFICATION AND "NO" ANSWERS:			

FIELDING AND LOGISTICS REVIEW			
ITEM	YES	NO	NA
6. FIELDING SUPPORT a. Did the unit receive a fielding and status report?			
b. Were all materiel, technical documents, equipment, and facilities available for receipt, deprocessing, and hand off?			
c. Was needed technical expertise and data available to support successful equipment fielding?			
7. SUPPLY SUPPORT a. Were copies of applicable provisioning documents provided (APLs and AELs)?			
b. Were all collateral, consumables, and equipage documented on equipment AELs provided?			
c. Were all tools, special tools, general test equipment and special purpose test equipment provided?			
d. Were all required spare parts available?			

ITEM	YES	NO	NA
8. Transportation and Handling. a. Did the end item and all associated equipment arrive in acceptable condition?			
b. If not, were appropriate discrepancy documents submitted?			
9. Technical Data. a. Were required training instructions and manuals provide prior to or concurrent with equipment fielding?			
b. Were all required Technical Manuals (Operation, Maintenance, and Parts) and other technical documentation provided?			
10. Training. a. Was adequate equipment operations and maintenance training provided?			
b. Was training conducted as stated in the ULSS?			
c. Were all required training aids available for equipment training?			
11. Maintenance. a. Were all resources necessary to conduct unit corrective maintenance available prior to or concurrent with equipment fielding?			
b. Was PMS (MIPs/MRCs) documentation available prior to or concurrent with equipment fielding?			
c. Were all resources required to perform PMS available prior to or concurrent with equipment fielding?			
12. Other logistics support. a. Were all other logistics requirements/ resources documented in the equipment ULSS available prior to or concurrent with equipment fielding?			
b. Was any other logistics support needed for the fielding that was not planned for and provided?			
COMMENTS FOR CLARIFICATION AND “NO” ANSWERS:			

Appendix D
User's Logistics Support Summary (ULSS) Template

USER'S LOGISTICS SUPPORT SUMMARY

Insert Equipment Picture

Equipment Nomenclature

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PUBLISHED BY DIRECTION OF COMMANDER, NAVAL FACILITIES ENGINEERING COMMAND (NAVFAC), NAVFAC EXPEDITIONARY PROGRAM OFFICE

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FOREWORD

This User's Logistics Support Summary (ULSS), effective upon receipt, advises Expeditionary Forces of the plan to field and logistically support the System Nomenclature, Model Number, and National Stock Number.

This ULSS has been prepared under the direction of the Commander, Naval Facilities Engineering Command (NAVFAC), NAVFAC Expeditionary Program Office (NEPO) in accordance with Department of Defense (DoD) and Secretary of the Navy (SECNAV) 5000 series instructions.

NEPO has designated the Naval Facilities Expeditionary Logistics Center (NAVFAC ELC) as the In-Service Engineering Agent (ISEA) for the (System Nomenclature). The NAVFAC ELC Supportability Branch, Code N432 prepared this ULSS and the document will be updated as major changes occur or as directed by NAVFAC, NEPO. Comments or suggestions for improvement of the (System Nomenclature) logistics support program are encouraged and welcomed and should be submitted to the Expeditionary Distance Support Desk via the Global Distance Support Desk. Instructions for using the Global Distance Support Desk are provided in Section #.

Key personnel responsible for implementing the support program for the (System Nomenclature) are identified in Section # of this ULSS.

This document contains no classified material. Classified information required in defining and planning logistics support elements will be provided by direct reference to the appropriate documents as required. While authoritative in scope, this ULSS does not constitute or grant authority or approval for the modification, revocation, or addition to any contract or subcontract.

1. PROGRAM OVERVIEW

   a. Source of Requirement (List TOAs)
   b. Replaced Systems
   c. Fielding Methodology Overview
   d. Program Points of Contact

2. SYSTEM INFORMATION

   a. Nomenclature
   b. Brief System Description
   c. ECC
   d. National Stock Number
   e. EIC/ESWBS
   f. Unit of Issue
   g. Petroleum, Oil, Lubricants (POL)
   h. Equipment Density
   i. Physical Characteristics (TUCHA Data)
   j. Power Requirements
   k. Operational Requirements
   l. Associated Weapon Systems
   m. Safety and Hazardous Material

3. LOGISTICS SUPPORT

   a. Maintenance Planning: Briefly describe the system's maintenance concept. Include any interim support strategies and plans to transition to other maintenance strategies.
   b. Contractor Support Requirements: Describe any interim and contractor support strategies. If required, describe any depot support being provided by the contractor.
   c. Supply Support: Briefly describe the supply support concept in place to support the system. Provide any interim strategies put in place, secondary repairable management, and the material support date. Provide list of provisioning documents as shown below.

Equipment Nomenclature	**APL/AEL Number**
List System APLs	
List System AELs	

d. Technical Data: Document the technical data available to support the system. Provide listing of Technical Data as shown below:

TM Title	TMNS Number	Stock Number
TM Long Title		

e. Support Equipment: Document any special and common tools; special and general purpose support equipment, and any other support equipment required to support the system. If necessary, show the support equipment densities for each TOA.
f. Training and Support: Describe the training concept put in place for the system, listing any new equipment training, initial training and formal follow on training. Ensure training locations and points of contacts to request quotas are provided. If part of the NTSP process, then document appropriately. Also, document any training facilities and simulators used in the training process.
g. Computer Resources Support: Document any required computer and software resources necessary to support the system. If none, then enter NA.
h. Other Logistics Elements: List any other logistics elements developed as part of the product support package for this system, i.e. PHS&T, Facilities, etc..
i. Warranties: List applicable warranties, warranty details, and provide Warranty Coordinator point of contact.

4. Materiel Fielding

a. List actions required to put item into service (if applicable).
b. Materiel Defect Reporting.
c. Disposition Instructions for replaced equipment.
d. Security Requirements (if applicable).

5. EXPEDITIONARY DISTANCE SUPPORT DESK

a. Distance Support Portal. The Distance Support Portal, which houses the Navy Anchor Desk (http://www.anchordesk.navy.mil/AD_Main.htm), provides fleet personnel a single desktop point of entry that can be used to access tactically significant support within the Navy's infrastructure. The Anchor Desk was designed to answer technical questions, solve logistics problems, resolve supply issues, address systemic problems, and improve equipment operability and maintainability. Its capabilities have expanded to support all questions related to ordnance, personnel, medical, training chaplain services and more. End users seeking (System Nomenclature) support can use the Anchor Desk for general assistance tools and to and submit deficiency reports. The end user's requests for assistance and deficiency report forms will be routed to the ISEA for the (System Nomenclature).
b. Toolbox. The Toolbox area, located on the Portal Main Menu page, includes support links for (System Nomenclature) users. From here, end users can contact

the Global Distance Support Center via the email address Help@AnchorDesk.Navy.Mil, telephone number 1-877-418-6824 or naval message address PLAD: ANCHORDESK NORFOLK VA. End users can also submit distance support request forms at the URL http://www.anchordesk.navy.mil/htm/Select-a-Request.htm. A graphic display of the Main Menu page is shown in Figure 4-1.

Figure 5-1 Anchor Desk Main Menu Page

c. Portal Training. End users can learn how to utilize and navigate through the Anchor Desk by taking the Distance Support Portal Training at the following URL http://www.anchordesk.navy.mil/training/DSPortalTraining.ppt.

d. Portal's User's Guide. The bottom of the Main Menu page provides links to Portal specific information such as a link to access the User's Guide (http://www.anchordesk.navy.mil/UsersGuide/UG-Intro.htm#MainMenu) which can be used to explain the functionality of the Anchor Desk.

APPENDIX A: Fielding Schedule

APPENDIX B: Distribution Schedule for Support Equipment (if applicable).

APPENDIX C: Corrective Action Plan for any organic logistics products not complete at the Initial Operating Capability (IOC) date.