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## NAVAIR ACQUISITION GUIDE 2008/2009

This is the 22nd Edition of the NAVAIR Acquisition Guide. Constructive changes/recommendations are encouraged. POCs: Lola Scott, AIR-1.1 ([lola.scott@navy.mil](mailto:lola.scott@navy.mil)) or Florine James, AIR-1.1 ([florine.james@navy.mil](mailto:florine.james@navy.mil))

This guide is available for download at the websites listed below:

The NAVAIR Program Management Community WebTool, available within the NMCI firewall at <https://home.navair.navy.mil/pmcwebtool/> go to Policies and Processes, then NAVAIR, then click on Acquisition Guide, and select either the MS Word or PDF version.

My NAVAIR at <https://mynavair.navair.navy.mil/portal/server.pt>; after logging in, click on Acquisition, and then the NAVAIR Acquisition Guide.

The AT&L Knowledge Sharing System at <http://akss.dau.mil/jsp/NavairAcqGuide.html>.



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## **CHAPTER I: INTRODUCTION & OBJECTIVE**

### **1.1 The Guide: What It Is and Is Not -**

1.1.A This Guide was developed in recognition of the need to:

- ◆ Provide a consolidated overview of the major internal Naval Air Systems Command (NAVAIR) acquisition processes.
- ◆ Provide a quick, ready reference for identifying the major reviews, approval levels, and documentation requirements associated with the acquisition process.
- ◆ Provide helpful advice from our "corporate memory" to Program Managers (PMs) and their Integrated Program Teams (IPTs), and to team members who are new to NAVAIR and/or to the acquisition process.
- ◆ Provide a list of key acquisition experts and process managers to assist the PMs/IPTs through the acquisition process.

1.1.B The following points represent what this Guide is not intended to do:

- ◆ It does not supersede existing Instructions, Directives, Notices, or otherwise established Department of Defense/Department of the Navy DoD/DoN/NAVAIR policy on the acquisition process.
- ◆ It does not describe every activity and/or document required in managing a program within NAVAIR.
- ◆ It is not a "cookbook" approach to our acquisition process. The uniqueness of each acquisition program precludes such an approach.

### **1.2 The Guide - Its Purpose**

1.2.A The systems acquisition and life cycle management process for the development, production, and support of weapon systems to satisfy the needs of the Fleet is complex and lengthy. There are numerous interrelated DoD and Navy directives and implementing instructions detailing each part of the process.

1.2.B The purpose of this NAVAIR Acquisition Guide is to identify the key activities and critical documentation required, and to put these requirements in a concise, maintainable, and easy-to-use format to help our PMs/IPTs plan ahead. The need for PMs, IPT leaders, and their attendant team members, particularly members new to Naval Aviation, to know the processes and sequence of events, and the average cycle times to complete events, is essential for planning their programs and ensuring timely obligation/expenditure of funds budgeted. In addition, by seeing the entire process, our NAVAIR leadership can focus on better ways to manage that process by establishing time limits for different parts of the acquisition cycle and minimizing the number of required events, and by monitoring system performance measurement against the established process standards.

1.2.C Members of the Naval Aviation Community are encouraged to use this Guide as a ready reference, and to make constructive comments for continual improvement to AIR-1.1, the NAVAIR Acquisition Guide managing editor.

### **1.3 Acquisition Training**

1.3.A An overview and application of many of the topics addressed in this Acquisition Guide can be obtained through the NAVAIR acquisition computer-based training (CBT) entitled the "Integrated Program Team (IPT) Leader CBT". The IPT Leader CBT course, sponsored by the Assistant Commander for Acquisition, AIR 1.0, is presented through a series of modules with acquisition process experts from within NAVAIR who have extensive experience in performing key segments of the acquisition management process. The objectives of the training are to improve management skills of IPT Leads, to develop an understanding of the Competency Aligned Organization (CAO)/IPT organization, and to enhance leadership/program skills.

1.3.B The IPT Leader CBT course has 11 modules on the Navy E-Learning through Navy Knowledge Online (NKO). Modules include: Introduction, CAO/IPT Operating Principles, NAVAIR Business Model, Acquisition/Program Management, Test and Evaluation, Systems Engineering, Risk Management, Logistics, Legal Counsel, Cost Concerns, Contracts, Business/Financial Management, and Conclusion. Each module introduces Management and Leadership concepts used to organize, manage, and lead an IPT.

1.3.C The targeted audience for the "Integrated Program Team Leader CBT" includes new IPT Leads and other interested personnel recommended by the PMAs. Register at <https://www.nko.navy.mil/>

1.3.D POC: Noreen A. Morrison, AIR-1.5, 757-6606

## CHAPTER II: NAVAL AVIATION ACQUISITION AND SUPPORT ORGANIZATION

2.1 Background. To understand how our acquisition processes operate, it is important to understand our acquisition structure, how we got where we are, and where we are going. During the 1990s, NAVAIR completed an extensive four-year, three-phase transition from a program/functional matrix organization with site specific characteristics, to a competency aligned organization (CAO) that spans seamlessly across all sites encompassed in the Naval Air Systems Team structure. Our CAO/IPT concept of operations represents continuing evolution of many of the key management principles originally sought by the Packard Commission of the mid-1980s, the Goldwater-Nichols Reorganization Act of 1986, the Defense Management Review of 1989, and the many on-going Acquisition Reform Initiatives. Clear understanding of individual responsibilities, establishment of authority commensurate with such responsibilities (i.e., empowered individuals taking ownership of their areas of program or functional responsibility), and efficient use of small high quality staffs (i.e., trained, developed, empowered, and equipped with the necessary skills, tools, and work processes to be functionally proficient), are all a part of the overall characteristics of successful commercial and government projects that were the basis for our transition to CAO/IPT. The following discussion synthesizes key events that significantly influenced our evolution and current organization structure, as well as NAVAIR's operating concepts over the last fifteen years:

- ◆ In July 1989, the Defense Management Report (DMR) directed certain DoD organizational changes to implement the Goldwater-Nichols DoD Reorganization Act of 1986 (Public Law 99-433), to streamline the acquisition process, and to enhance acquisition accountability. The DMR mandated designation of a single civilian official at the Assistant Secretary-level within each Military Department as the Component Acquisition Executive (CAE). Within each Service, the CAE manages all major acquisition programs through Program Executive Officers (PEOs). The Assistant Secretary of the Navy (Research, Development and Acquisition) (ASN(RD&A)) is the Navy CAE.
- ◆ In October 1990, the Navy Plan for Initial Implementation of the DMR was issued. This Plan established three Naval Aviation PEOs, reassigned certain major acquisition programs and related non-major programs from NAVAIR to PEO management structures, and redefined COMNAVAIRSYSCOM's principal mission to three primary roles: 1) providing in-service support, 2) managing programs not assigned to PEO structures, and 3) providing support services to the PEO/PMs without duplication of function. The three Naval Aviation PEOs are the PEO for Tactical Aircraft Programs (PEO(T)); the PEO for Air ASW, Assault, and Special Mission Programs (PEO(A)); and the PEO for Unmanned Aviation and Strike Weapons (PEO(U&W)). The figure at the end of this chapter shows the current program alignment. A joint service PEO has also been established for the Joint Strike Fighter (JSF).
- ◆ In May 1995, SECNAVINST 5400.15A was issued by the Secretary of the Navy to describe the relationships between ASN(RD&A), the PEOs/Direct Reporting Program Managers (DRPMs), the Chief of Naval Operations (CNO), and the Commandant of the Marine Corps (CMC) for research, development, acquisition, and associated life cycle management responsibilities. As defined therein, PEOs and DRPMs are responsible for managing assigned programs and all aspects of life cycle management for those programs. In doing so, PEOs and DRPMs report directly to the CNO and CMC, through the applicable SYSCOM Commander, for matters pertaining to in-service support. However, PEOs and DRPMs will continue to report directly to ASN(RD&A) for all matters pertaining to acquisition.
- ◆ In August 1997, NAVAIR concluded a four-year transition from a traditional program/functional matrix organization with unique organizational and functional characteristics inherent at each NAVAIR site/activity, to a seamless (i.e., uniformly configured) organization centered around PM-led IPTs supported by personnel, processes, and facilities provided from seven competencies. The transition began in the spring of 1993 with a Reengineering Study Team consisting of senior management personnel from throughout NAVAIR. This team initiated a review of our NAVAIR/PEO organization in light of the impact of the 1993 Base Realignment and Closure (BRAC) effort and the anticipated future budget outlook for Naval Aviation. This review, generally referred to as CONOPS (Concept of Operations) and presented at the Commander's Conference of October 1993, concentrated on how we could better operate our business and how a potential restructuring could accommodate and build upon the BRAC consolidation challenges. The results and recommendations of the

Reengineering Study Team's review were incorporated into the Commander's Team "Transition Plan" of 31 January 1994. Additional guidance has since been provided by the NAVAIR Transition Plan of February 1996 and the IPT Manual of December 1996. The two major thrusts of our CAO/IPT concept of operations focus on how NAVAIR effectively concentrates resources on the needs of our customers and how NAVAIR organizes to preserve and regenerate resources to meet the future needs of Naval Aviation. The Naval Aviation community has developed IPTs, fully empowered under Program Manager Air (PMA) leadership, to manage their assigned program responsibilities and resources from concept to disposal (i.e., product focused life cycle management), and a CAO to develop and sustain resources in support of IPTs and other needs.

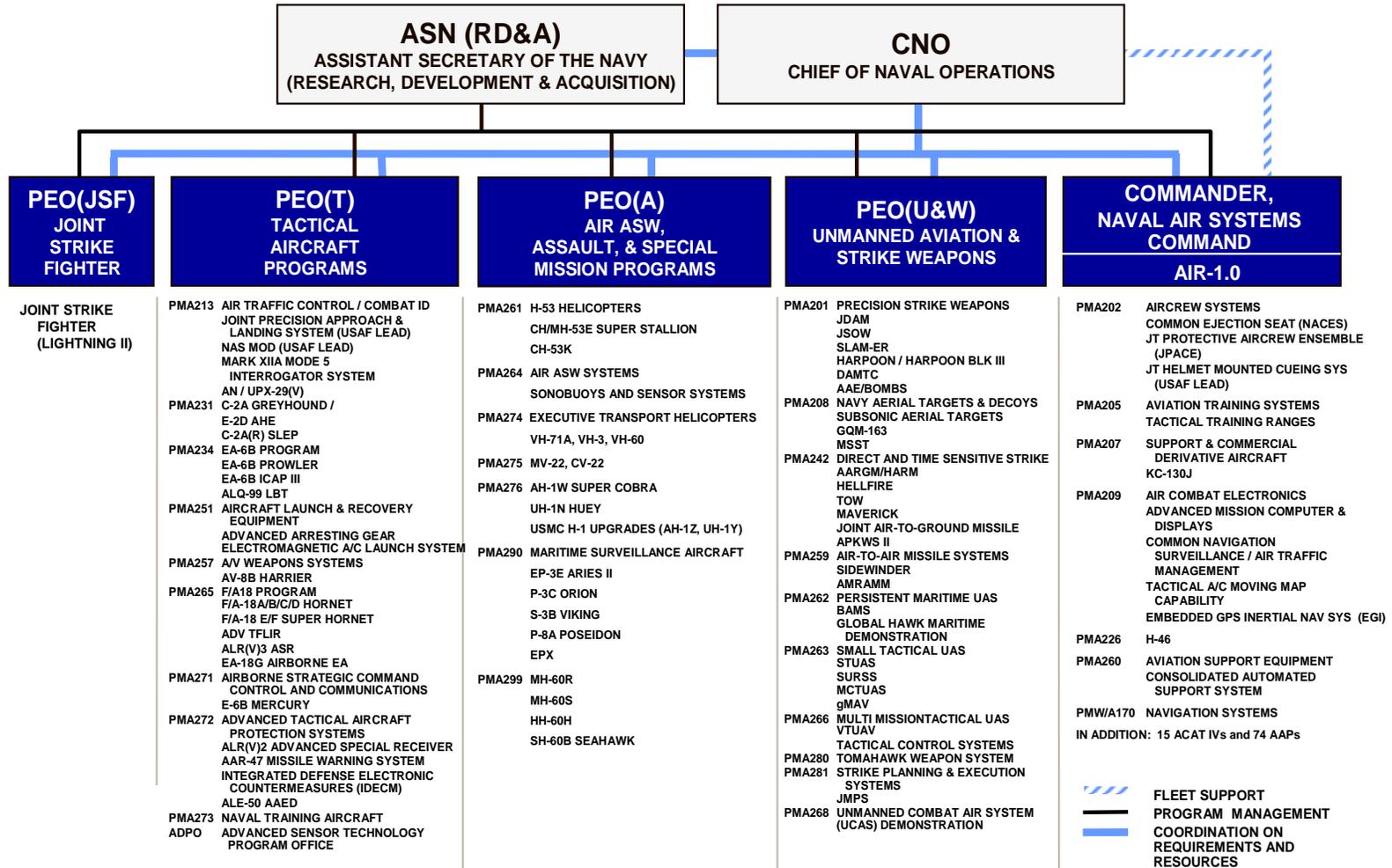
2.2 Teams. The heart of our CAO/IPT CONOPS is the operation of IPTs under the direction of the PMAs. Our program managers, in their efforts to develop and deliver products, services, and support to our customers, now have control over their technical and supporting personnel at every site. These IPTs, with responsibility spanning the complete program life cycle, provide a responsive, single face to the customer, improving our ability to control performance, cost, and schedule. Similar benefits have accrued with formation of Externally Directed Teams (EDTs), Enterprise Teams (ETs), and Product Support Teams (PSTs). EDTs are those teams formed to manage support of programs provided to customers external to NAVAIR (i.e., teams supporting non-Naval Aviation customers, including other services). ETs support multiple customers and are formed to manage functions or indirect efforts (e.g., Human Resources, Corporate Operations) essential for the operation of the Naval Aviation community to ensure mission success. PSTs represent direct project-related work that is not easily identified by individual customers but involves hands-on efforts to deliver products (e.g., test ranges for multiple aircraft/weapons) and efforts from individuals who support many customers.

2.3 CAO. The CAO links people with like capabilities across all NAVAIR sites into competencies. The eight competencies are: Program Management (1.0), Contracts (2.0), Research and Engineering (4.0), Test and Evaluation (5.0), Logistics and Industrial Operations (6.0), Corporate Operations (7.0), Comptroller (10.0) and the Office of Counsel (11.0). These competencies provide both organization-wide pools of talent and the leadership to unite people who are doing similar work by common processes, and to train and develop these people to proficiency. Instead of only thinking of a specific site's personnel and capital resources to solve a problem, the CAO is able to use its total strength. The central functions of the CAO are to develop and nurture processes, prepare and train people, and provide facilities to support the success of IPTs, EDTs and ETs aimed at satisfying customer demand.

2.4. Acquisition Procedures: The charters for the PEOs and DRPMs provide where possible, NAVAIR instructions implementing DoD/DoN acquisition policy will be adhered to in the conduct of acquisition operations. This ensures consistency and uniformity of acquisition and support across Naval Aviation weapon systems/equipment under PEO, DRPM, and NAVAIR responsibility. This Acquisition Guide provides an overview of many of those critical acquisition processes. However, it should be understood that PEO/DRPMs also have the authority to deviate from such instructions in the exercise of sound business and technical judgment.

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# NAVAL AVIATION ACQUISITION PROGRAM ALIGNMENT



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## **CHAPTER III: SOURCE DOCUMENTS FOR THE DEFENSE ACQUISITION SYSTEM AND THE JOINT CAPABILITIES INTEGRATION AND DEVELOPMENT SYSTEM**

### 3.1 Source Documents:

DoD Directive 5000.1 of 12 May 2003

DoD Instruction 5000.2 of 12 May 2003

Chairman of the Joint Chief of Staff Manual 3170.01B of 11 May 2005

Chairman of the Joint Chiefs of Staff Instruction 3170.01F of 1 May 2007

The Defense Acquisition Guidebook, promulgated Oct 2004

SECNAVINST 5000.2D

The DoN Acquisition and Capabilities Guidebook, promulgated Feb 2005

### 3.2 Definition

3.2.A The Defense Acquisition System is the management process by which the Department of Defense (DoD) acquires quality products in a timely manner, at a fair and reasonable price, and which satisfies user needs with measurable improvements to mission capability and operational support. The Defense Acquisition System exists to manage the nation's investments in technologies, programs, and product support in such a way so as to achieve the National Security Strategy to support not only today's armed forces, but also the next force and future forces beyond that.

3.2.B The Joint Capabilities Integration and Development System (JCIDS) provides the procedures used by the Chairman of the Joint Chiefs of Staff (CJCS) and the Joint Requirements Oversight Council (JROC) to identify, assess, and prioritize joint military capability needs, as required by statute.

### 3.3 Discussion

3.3.A DoD Directive 5000.1, subj: The Defense Acquisition System, and DoD Instruction 5000.2, subj: Operation of the Defense Acquisition System, both issued on 12 May 2003 and referred to as the DoD 5000 series documents, provide the policy framework for translating mission needs into stable, affordable, and well managed programs. These two documents can be found at <http://akss.dau.mil/jsp/default.jsp>. This website is associated with OSD's Acquisition, Technology, and Logistics (AT&L) Knowledge Sharing System (AKSS), which is further described in the next chapter of this Guide. The Defense Acquisition Guidebook, established in October 2004 as an electronic reference, replaced the cancelled DoD Regulation 5000.2R by providing discretionary best business practices as well as the supporting policies and statutes, and lessons learned. The Defense Acquisition Guidebook is available at <http://akss.dau.mil/dag/>.

3.3.B CJCS Instruction 3170.01E, subj: Joint Capabilities Integration and Development System, establishes the JCIDS policies and procedures. In addition, this instruction, and its accompanying CJCS Manual 3170.01B, subj: Operation of the Joint Capabilities Integration and Development System, provide detailed direction concerning the preparation, staffing, and approval of the key capabilities documents: the Initial Capabilities Document (ICD), the Capability Development Document (CDD), and the Capability Production Document (CPD). Both the instruction and the manual can be found at [http://www.dtic.mil/cjcs\\_directives](http://www.dtic.mil/cjcs_directives).

3.3.C SECNAVINST 5000.2D, subj: Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System, issues mandatory procedures for DoN implementation of the DoD 5000 series directives and the CJCS JCIDS directives for both major and non-major defense acquisition programs and major and non-major information technology acquisition programs. The SECNAVINST 5000.2D is at <http://doni.daps.dla.mil/>. A discretionary DoN Acquisition and Capabilities Guidebook providing best practices and other non-mandatory guidance can be found at <http://akss.dau.mil/jsp/default.jsp> (under the "AKSS menu",

select “Policy Documents”, select “Organizations”, and click on “Navy/Marine Corps Common”, then click on “Go to List of Discretionary Documents” and “DoN Acquisition and Capabilities Guidebook”).

3.4 POC: Lola Scott, AIR-1.1, (301) 757-7228

# CHAPTER IV: THE ACQUISITION KNOWLEDGE MANAGEMENT SYSTEM (AKMS)

## 4.1 Acquisition Knowledge Management System

4.1A Knowledge Sharing is the blending of people, processes, and information technology – improves organization performance through increased efficiency, effectiveness, and innovation. The Defense Acquisition University (DAU) provides the AT&L workforce with access to acquisition resources and learning assets via the Acquisition Knowledge Management System (AKMS). The AKMS consists of the Acquisition, Technology, & Logistics (AT&L) Knowledge Sharing System (AKSS) Portal, the Acquisition Community Connection (ACC) system, Ask-A-Professor (AAP), and the ACQuire Enterprise Search Engine.

4.1B DAU manages the AT&L Knowledge Sharing System (AKSS) Portal, along with two Acquisition Knowledge Gateways, the Defense Acquisition Guidebook (DAG), and the Integrated Framework Chart (IFC), and ACQuire, the DAU enterprise search engine which provides easy-to-access information to the workforce in an environment that encourages and rewards knowledge sharing - the right information in the right place at the right time.

4.1C The AKSS Portal is the central gateway for all of the AT&L resources and information, and a central source for current information on acquisition initiatives. As the primary reference tool for the Defense AT&L workforce, it provides a means to link together “golden sources” of information and reference assets from various disciplines into a single integrated, centralized information source.



### 4.1.C.1 New AKSS Portal Functions –

#### 4.1.C.1.1 Filtering the AKSS Home Page

The front page content can be filtered by Service or Career Field. Content can be reorganized by the user according to their Career Field or Organization. Selecting within these categories will cause the entire menu of AKSS to focus on the content with the selected function.

#### 4.1.C.2 Filtering the AKSS Menu

Additional filtering functions are available in the AKSS Menu for News and Publications, AT&L Websites, and Guidebooks and Handbooks, in the AKSS Menu. Users can select the focus of the menu item by selecting Service or Career Field, or by using the alphabetical listings.

#### 4.1.C.3 Select AKSS Page Content

Page content can be adjusted by selecting suggested reading, reader's choice, or recent contributions. Additional selections can be made to view the Really Simple Syndication (RSS) news feeds for service oriented acquisition news.

#### 4.1.C.4 Future Functionality

The AKSS Portal is the first step and milestone in a plan to offer a personalized Acquisition Portal for AT&L users, so you can customize your workspace to more efficiently meet knowledge requirements in your daily work.

4.1D The AKSS Portal Menu Users have a variety of topical information available to them in the AKSS Portal Menu, including:

- [Policy Documents](#) – Links to the original sources for mandatory and discretionary policies, directives and instructions. Documents are organized by hierarchical issuance (Public Law, FAR, DoD, Service, Agency) and by functional category (program management, logistics, contracting, etc.). Documents are maintained and updated through notices of posted updated web-links.
- [FAR, DFAR, and Other FAR Supplements](#) – Offers a direct link to the Federal Acquisition Regulations, Defense FARs, and other service and agency FAR supplements. In addition, the DFAR link has a sub-link directly to the [Defense Procurement and Acquisition Policy \(DPAP\) Policy, Guidance, and Information \(PGI\)](#) webpage for specific and topical information on the latest DFAR updates.
- [Community Areas \(Communities of Practice\)](#) – Community Areas avails the user of dozens of active communities and special interest areas, containing thousands of knowledge objects which provide discretionary information for the AT&L workforce. Through this link, the user can obtain guidance and advise, practical examples, lessons learned, and collaborate with other users within their area of interest.
- [Glossaries and Acronyms](#) – A selection of glossaries compiled by DAU, services, agencies, and other sources within DoD. Users can select the glossary type which is most closely associated with their item of interest, or use the AKSS search engine to scan all of the glossaries simultaneously.
- [Education and Training](#) – A listing of educational opportunities in career advancement, job enhancement, inter-service job exchange, professional development and degree programs, and professional certification. In addition, users can take immediate advantage of DAU training opportunities through the links at the top of the AKSS Home page, [Training Courses](#) and [Continuous Learning](#).
- [Software Tools](#) – Tools which have been developed either directly or under contract to services and agencies, which provide a solution or assistance in a specific acquisition area. Each tool is described as to capability, application, availability, cost, and technical requirements. Points of contact are listed to assist the user in tool acquisition and use.
- [Events](#) – Links to notices or conferences, symposiums, special meetings and other events of interest to the AT&L community.
- [News and Publications](#) – Publication websites have been organized for the users' convenience as acquisition news from external links, and periodicals and journals by organizations and by career field or topics.

- [AT&L Websites](#) – Recommended as having information of interest and pertinent to the AT&L community. Sites are organized both alphabetically and by functional category to assist in searching an area of interest.
- [Guidebooks and Handbooks](#) – Discretionary documents, organized alphabetically and by functional category, providing detailed information on a wide variety of topics of vital interest to the AT&L community. They have been submitted from DAU, OSD, services, and agencies and are maintained by the owners and sponsors.
- [Defense Acquisition Policy Center](#) – Links to the latest information regarding the DoDD 5000.1, the DoDInst. 5000.2, the [Interactive Guidebook](#), and related service policy instructions, as well as specific tutorials and briefings on the latest acquisition policies.
- [Video Library](#) – Videos which can be viewed on the desktop, are organized into seven categories providing a multi-sensory information and instruction on a variety of subjects, such as Continuous Learning and Conferences, Training, Knowledge Management, and DAU itself.
- [Rapid Development Training](#) - The Rapid Development Training (RDT) Initiative was established in response to the need to more rapidly train the workforce in new initiatives and policy changes. RDT includes quick notification and training of the acquisition workforce by posting new policy training materials online within hours after policy release and sending DAU training teams to DoD AT&L field organizations.
- [Ask a Professor](#) – Allows the user to ask a question, conduct an on-line answer search, and, if necessary, query an expert in the applicable category or career field. Questions for all venues of the acquisition process are welcomed from both government and contractor acquisition professionals.
- [Forms](#) - Direct access to DoD, service, and agency form sites. This ensures that the most up to date forms are immediately available in electronic format.
- [Ethics](#) – Provides instructions and guidance on the standards of conduct expected of each and every member of the AT&L government community.

Note: The list of menu items is duplicated on the [AKSS search engine](#). Users can choose to search on key words, exact titles, phrases (by using quotation marks), instruction numbers, and most importantly, one or more of object libraries. Search results that are too productive can be more narrowly focused by using the “search within search” option and additional key words. Use the “Search Tips” and “Search Help” for additional assistance.

AKSS CD - If a user anticipates being in an environment where the internet is not available, a 2 CD set can be ordered by subscription. The CD set will contain most of the menu including mandatory and discretionary documents, guidebooks, handbooks, AAP database, FAR, DFAR, Far Supplements, forms, and glossaries and acronyms, including a PDF file of the DoD 5000 series and guidebook. Review the system requirements to make sure individual PCs can support the application.

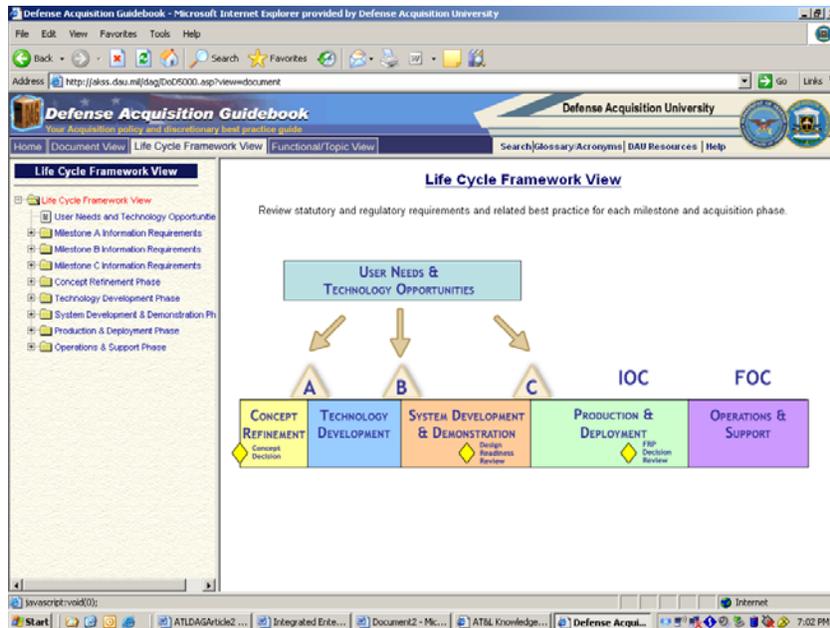
4.2 [Acquisition Knowledge Gateways](#) - Three additional Knowledge Gateways have been created and are featured on the AKSS home page. These tools are available through Quick Links to the [Defense Acquisition Guidebook \(DAG\)](#), [Integrated Framework Chart \(IFC\)](#), and the [AAP Application](#).

4.2A [Defense Acquisition Guidebook](#) - The DAG is an interactive Web-based tool. Users can navigate interactively through key terms and requirements in DoD Directive 5000.1 and DoD Instruction 5000.2 and to discretionary guidance in the Defense Acquisition Guidebook. An [on-site tutorial](#) is available to assist users in discovering the capabilities and in the navigation of the DAG web-site. Various scenarios illustrate how the user might use the DAG to find relevant information to meet specific milestone or readiness requirements.

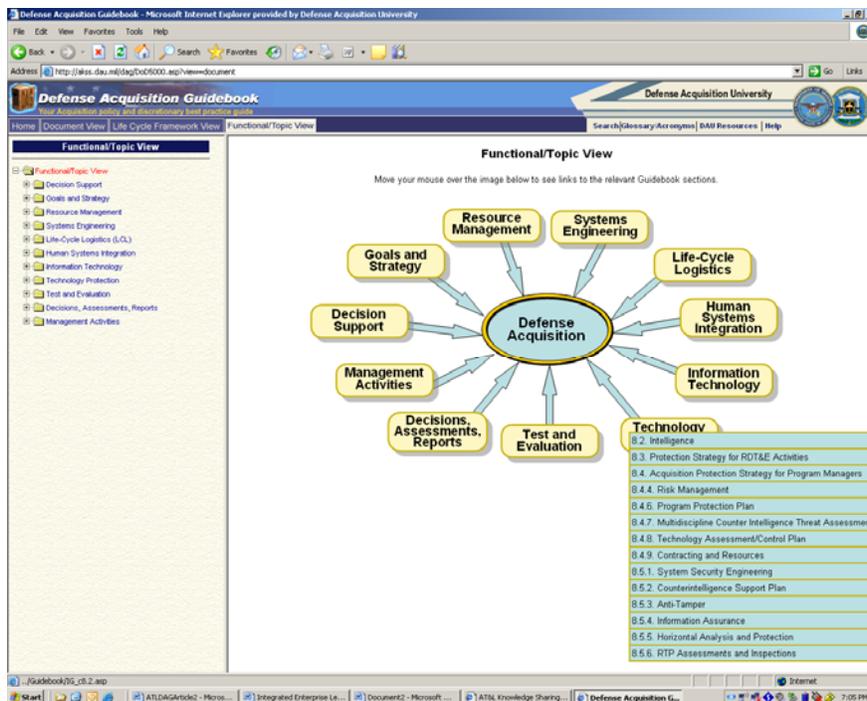
4.2B Document View - The table of contents for the directive, the instruction, and the guidebook, are broken down into discrete titled paragraphs and are displayed on the left page margin, while the content of the page selected is presented on center. The particular paragraph selected for display and viewing is also highlighted in red in the table of contents. As the user moves through the documents via the hyperlinks, the table of contents changes to match the new paragraph displayed. Thus, the user always knows the location within the policy documents. In addition, each chapter of the guidebook was designed and written in concert and coordination with all of the other chapters.



4.2C Life Cycle Framework View – The acquisition milestone graphic links the critical milestones to an interactive table that shows the user what the requirements are to meet each acquisition milestone, what standards guide those requirements, and how to create the required documentation necessary to successfully pass the milestone reviews. This view is designed for the user who has an immediate pending requirement, and needs to understand what documentation and processes must be completed prior to seeking to obtain milestone approval. Each step of this process is clearly portrayed in the graphic, and the user is quickly linked back to that portion of the guidebook that provides the elaboration.

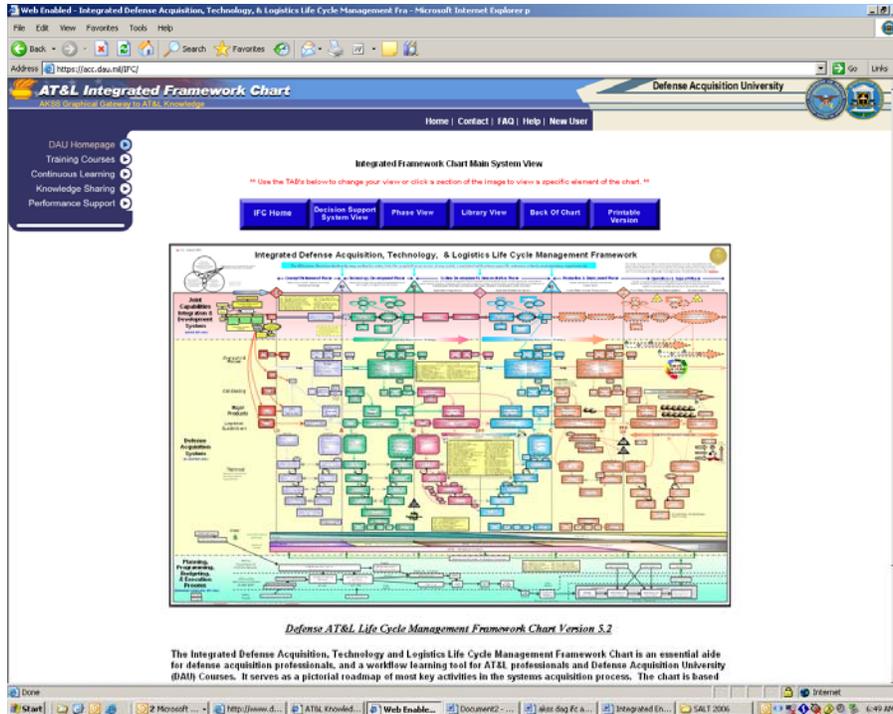


4.2D The Functional Topic View - The third presentation is for the user who is interested in using the guidebook content from a functional point of view. This user can select an area of interest on the topical graphic. The sections of the guidebook that particularly pertain to that functional topic are displayed. The AT&L user can then select the specific sub-function of interest.

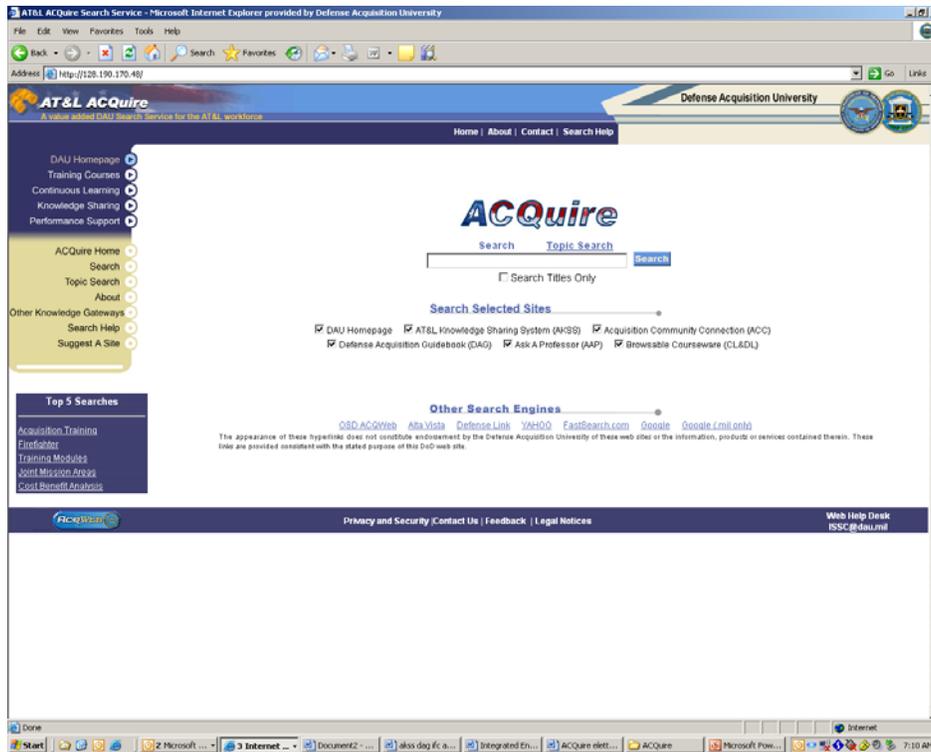


4.2E The Integrated Framework Chart (IFC) - The Web-enabled Version 5. IFC represents a new gateway to policy, guides, and other knowledge resources. The IFC is a graphical representation of the entire life cycle AT&L

decision, management, and budget process. Tasks and requirements have been presented as they relate to each other in both functional and time phase views. By selecting the Decision Support System View, the Phase View, or the Library View, the user can drill down to a particular activity block that is linked to a template or knowledge object containing pertinent acquisition information about that activity.



4.2F ACquire - A key element in the AT&L Knowledge Support Systems knowledge management is the ACQUIRE Search Engine. ACQUIRE is the enterprise search engine for the DAU information repositories. ACQUIRE allows the user to select the information source – AKSS, ACC, DAG, AAP, Distance Learning courses, Continuous Learning courses, and the virtual DAU library, and search for exact terms, phrases, multiple terms, acronyms, or numerical references. ACQUIRE will scan its libraries and provide a selection for review or for a further refined search. The ACQUIRE search can also be expanded by selecting to search from the most popular search engines. In addition, the complete DAU operation and resource taxonomy has been added to expand the search criteria. Search criteria can be selected from the exact terminology utilized in the management of DAU assets. The ACQUIRE search engine will provide the information when and where it is needed.

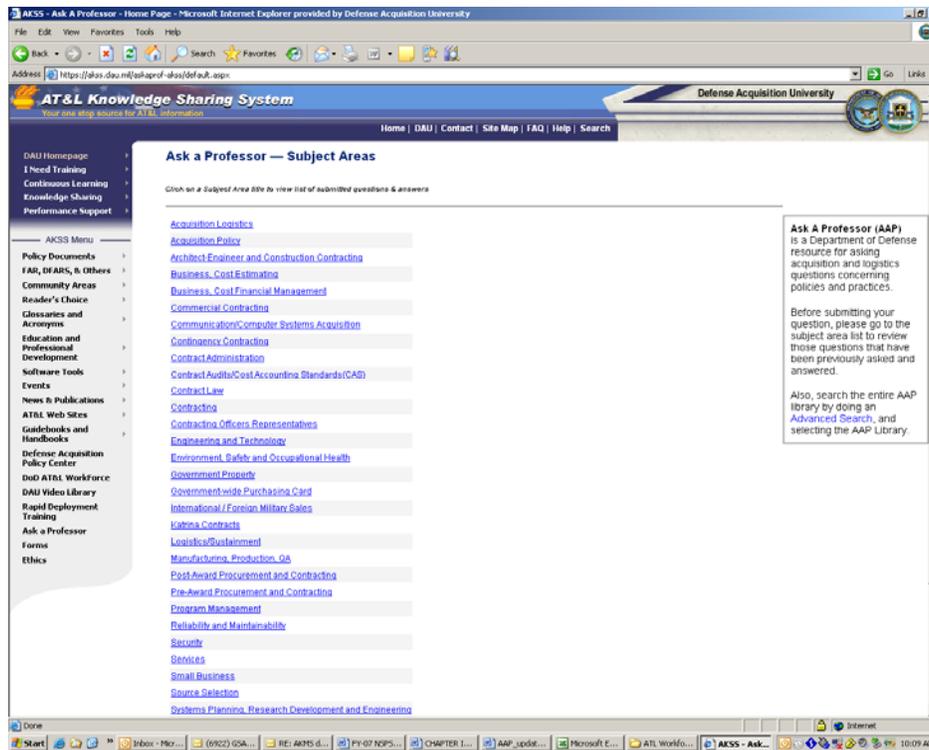


Become a part of the AT&L Knowledge Sharing System at <http://akss.dau.mil>. AKSS, the Acquisition Knowledge Gateways and ACQUIRE are AT&L resources. They are offered openly and freely to all members of the AT&L workforce. They should be used, critiqued, corrected when necessary, and improved in accordance with the needs of the community. Feedback and contact information is on the AKSS home page to make communications efficient and effective.

4.2G **AAP** The AAP program is a valuable web-based resource available 24 hours a day, seven days a week at <http://akss.dau.mil/askaprof-akss/default.asp>. Visitors may submit questions at any time relating to a variety of AT&L career fields, program areas and policies – including topic areas relating to acquisition logistics, contracting, engineering and technology, test and evaluation, program management, and many more – and can expect to receive a detailed, researched answer to their query from a knowledgeable DAU faculty member or DoD subject matter expert within a reasonable response time.

Users of the AAP system may also browse questions already answered, separated “FAQ-style” into categories generally aligned with AT&L career fields and programs. A robust advanced search option also allows users to type in key words or phrases to more quickly drill down to the AAP answers and content they need.

DAU is committed to improving the AAP by making more subject matter experts available to address submitted queries, by streamlining and improving AAP workflow process, and by refining and enhancing the system’s infrastructure.



### 4.3 Acquisition Community Connection

4.3A The Acquisition Community Connection (ACC)—Where the AT&L Workforce Meets to Share Knowledge—is an online collaboration forum that currently includes 12 Communities of Practice (CoP), 25 Special Interest Areas (SIA) and over 200 workspaces. Community content is focused on acquisition functional and process areas such as Program Management, Life Cycle Logistics, Systems Engineering, Contracting, Information Technology, and Risk. The ACC provides a collaborative environment for the AT&L workforce to:

- Access important acquisition resources
- Connect with professionals in your field
- Share information and knowledge
- Collaborate in discussion areas
- Create private workspaces

4.3B ACC is the collaborative arm of the AKMS consisting of online, publicly accessible Communities of Practice (CoPs) whose goal is connecting people and acquisition know-how across the Department of Defense (DoD) and industry. CoPs enable interaction and sharing of resources and experiences to support job performance, avoid duplication of effort, and advance the connection of people and ideas. Available via the Internet 24/7, ACC is an unclassified system facilitating knowledge sharing across the DoD AT&L workforce and industry.

Irrespective of membership, much of ACC’s information is publicly available without being logged on. By joining the ACC, members can access member contact information (personal profiles), initiate and participate in online discussions, contribute and share knowledge, and subscribe for updates. ACC is accessible at <https://acc.dau.mil>. To Join ACC go to <https://acc.dau.mil/join>.

Address: <https://acc.dau.mil/CommunityBrowser.aspx?id=1> Go Links



**Acquisition Community Connection**  
Where the DoD AT&L Workforce Meets to Share Knowledge

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- [EVM \(Earned Value Management\)](#)

Main View

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July 2007 Issue

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- [Operations Research/Systems Analysis](#)
- [Performance-Based Acquisition](#)
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## CHAPTER V: PROGRAM INITIATION PROCESS

5.1 Overview. Milestone A, held to obtain the Milestone Decision Authority's (MDA's) approval to enter the Technology Development Phase, is never used for formal program initiation. Milestone B authorizes entry into System Development and Demonstration (SDD), and is for most programs the point of formal program initiation. For those programs that do not require a development phase, program initiation can occur at Milestone C, the decision point for Commitment to Production.

### 5.2 Source Documents:

DoDI 5000.2, 12 May 2003  
CJCS INST 3170.01F, 1 May 2007  
CJCS Manual 3170.01B, 11 May 2005  
SECNAVINST 5000.2D

5.3 Concept Refinement. Concept Refinement is the first phase in the acquisition life-cycle and is used to refine the initial concept and, for a potential ACAT I or IA program, develop a Technology Development Strategy (TDS). Entrance into this phase requires:

5.3.A An approved Initial Capabilities Document (ICD) resulting from the analysis of potential concepts, sources of such concepts to include, as appropriate, other Services and DoD agencies, international systems from allies, and cooperative opportunities. Detailed guidance on ICDs can be found in the CJCSI 3170.01F of 1 May 2007, and its accompanying manual, CJCSM 3170.01B. The ICD replaces the requirement for a Mission Need Statement (MNS) (programs that have already completed Milestone A are not required to update the MNS with an ICD; no previously approved MNS greater than two years old will be used to support a Milestone A (or programs proceeding directly to Milestone B or C without a prior Milestone A)).

5.3.B An approved plan for conducting an Analysis of Alternatives (AoA) for the selected concept documented in the approved ICD. The purpose of the AoA is to refine the selected concept documented in the approved ICD. The AoA assesses the critical technologies associated with the concept, including technology risk, technology maturity, and, if necessary, technology maturation and demonstration needs. The AoA should consider existing commercial-off-the-shelf (COTS) solutions drawn from a diversified range of large and small businesses. For potential ACAT I and IA programs, the results of the AoA shall provide the basis for the TDS (see DoDI 5000.2, sections 3.5 & 3.6 for further details on the TDS).

5.3.C The Concept Refinement Phase may be initiated by a Concept Decision, at which the MDA for the prospective program approves the AoA plan and establishes a date for the Milestone A review. The MDA decision to begin Concept Refinement does not mean that a new acquisition program has been initiated.

5.4 Technology Development. The Technology Development Phase is entered at Milestone A. The purpose of this phase is to reduce technology risk and to determine the appropriate set of technologies to be integrated into a full system. Technology Development is a continuous technology discovery and development process designed to assess the viability of technologies while simultaneously refining user requirements. The phase should reflect close collaboration between the Science & Technology community, the user, and the system developer. A favorable Milestone A decision to enter Technology Development does not mean that a new acquisition program has been initiated.

5.4.A The ICD and, when applicable the TDS, shall guide the technology development effort. Multiple technology development demonstrations may be necessary before the user and developer agree that a proposed technology solution is affordable, militarily useful, and based on mature technology.

5.4.B If an evolutionary acquisition strategy is being used, the initial capability represents only partial fulfillment of the overall capability described in the ICD; therefore, successive Technology Development efforts would be initiated until all the required capabilities have been obtained. In an evolutionary acquisition, the

identification and development of the technology necessary for follow-on increments continues in parallel with the acquisition of preceding increments.

5.4.C The potential program exits the Technology Development Phase when an affordable increment of militarily-useful capability has been identified, the technology for that increment has been demonstrated, and a system can be developed for production within a relatively short timeframe (normally less than five years). During Technology Development the user shall prepare the Capability Development Document (CDD) to support program initiation, refine the integrated architecture, and clarify how the program will lead to joint warfighting capability. The CDD builds on the ICD and provides the detailed operational performance parameters necessary to design the proposed system. Detailed guidance on CDDs can be found in the CJCSI 3170.01F and CJCSM 3170.01B. The CDD replaces the requirement for an Operational Requirements Document (ORD); however, ORD updates and annexes developed in accordance with CJCSI 3170.01F will be accepted to support capability development.

5.5 Milestone B. A Milestone B decision follows completion of the TDP and is used to start the SDD Phase. Milestone B, for most programs, constitutes formal program initiation and it is usually at or just prior to this point that the program's acquisition category (ACAT) designation is assigned.

5.5A Entrance into SDD depends on technology maturity (including software), approved requirements, and funding. Prior to beginning SDD, users shall identify and the requirements authority shall approve the key performance parameters (KPPs), which will be incorporated in the CDD. At Milestone B, the PM shall prepare and the MDA shall approve an acquisition strategy to guide the program through SDD, and an Acquisition Program Baseline establishing performance, schedule, and cost program goals, expressed in objectives and thresholds, shall be signed by the PM and the Resource Sponsor, and approved by the MDA. The program should be fully funded at Milestone B. Further details on the SDD Phase and Milestone B can be found in DoDI 5000.2, section 3.7.

5.6 Milestone Information/Documentation. Prior to a formal milestone review, certain mandatory acquisition information/documentation for the program is required. Charts depicting the statutory and regulatory information/documentation requirements, and at what specific milestones they are required, can be found in SECANVINST 5000.2D, enclosure (3). These charts depict the ACAT level applicability for each information/document requirement and who has preparation and approval responsibility.

5.7 Lesson Learned. The program initiation process described above is extracted from DoDI 5000.2, which is written from the standpoint of ACAT I and IA programs. For many lower ACAT programs, particularly ACAT III and IV programs, a formal Concept Refinement Phase and TDP may not be necessary if the required technology already exists. For many such programs entry into the acquisition life cycle begins at Milestone B. For situations such as a COTS procurement, where no Navy development effort is required, entry into the life-cycle can begin at Milestone C. However, regardless of where an ACAT program enters the life cycle, an initial Acquisition Strategy Review with the MDA should be held in advance of the initial milestone so as to get the MDA's buy-in on the overall acquisition strategy proposed by the PM.

5.8 C4I Requirements Certifications. Programs that have C4I requirements must obtain certain certifications as part of the staffing process for ICDs, Capability Development Documents (CDDs), and Capability Production Documents (CPDs). C4I requirements derive from the acquisition and employment of National Security Systems (NSS), which include "equipment that is an integral part of a weapon or weapons systems" (CJCSI 6212.01D). Two primary certifications at Program Initiation are the 1) IT and NSS Interoperability and Supportability Requirements Certification and the 2) Intelligence Certification.

5.9 IT and NSS Interoperability and Supportability Requirements Certification. The Joint Staff J-6 will certify all CDDs and CPDs designated as Joint Requirements Oversight Council (JROC) Interest or Joint Integration for conformance with joint IT and NSS policy, and compliance with integrated architectures, interoperability standards, and net-centric data sharing (CJCSM 3170.01B, encl C). CNO (N8) submits all Naval CDD/CPD documents involving development, acquisition, or modification of C4I systems to J-6 via the Defense Information Systems Agency-managed Knowledge Management/Decision Support Tool. All ACAT I/IA capability documents are referred to the JROC, and J-6 coordinates the review process with the other commands/staffs/agencies. For further details, refer to Chapter VIII, Part C of this Guide.

5.10 Intelligence Certification. The Joint Staff J-2 will provide intelligence certification as part of the JCIDS staffing of JCDs, ICDs, CDDs, and CPDs, regardless of ACAT level, for those programs that consume, produce, process or handle intelligence data. J-2 will assess intelligence support needs for completeness, supportability, and impact on joint intelligence strategy, policy, and architectural planning. The J-2 certification will also evaluate intelligence handling and intelligence-related information systems with respect to open systems architecture, interoperability, and compatibility standards (CJCSM 3170.01B, encl C). For further details, refer to Chapter VIII, Part C of this Guide.

5.11 POC: Lola Scott, AIR-1.1, (301) 757-7228

## CHAPTER VI: PLANNING, PROGRAMMING, BUDGETING, AND EXECUTION (PPBE) PROCESS

### 6.1 Overall System

6.1.A Flow Process. A macro view of a procurement program in the PPBE process would cover eight years from the time of identification in the Future Years Defense Program (FYDP) until those funds expire for new obligation. For a procurement program starting in FY 2010:

| <u>Year</u> | <u>Identification</u>   |
|-------------|---|
| 04          | First identified in FYDP (fifth year of POM-06), (POM-06 submitted in 5/04) |
| 06          | Third year of POM-08, (POM-08 submitted in 5/06)                            |
| 08          | First year of POM-10, (POM-10 to be submitted in 7/08)                      |
| 09          | FY 10 budget sent to Congress (2/09)  |
| 10          | Current year - first year of availability (10/1/09)                         |
| 11          | Second year of availability   |
| 12          | Third year of availability. Expires for new obligations on 9/30/12          |
| 17          | Appropriation canceled (9/30/17)  |

6.1.B Purpose. The Planning, Programming, and Budgeting System (PPBS) process had served as DoD's central strategic planning, program development, and resource determination process since the 1960s. The principal purpose of PPBS had been to integrate the information necessary to craft effective plans and programs that address existing and emerging needs into a disciplined review and approval process. However, the Department's processes for strategic planning, identification of needs for military capabilities, systems development and acquisition, and program and budget development were not well integrated. A major goal of the Department was to strategically link any major decisions (e.g., acquisition, force structure, operational concepts, infrastructure) both to the Defense Planning Guidance and to program and budget development. Management Initiative Decision (MID) 913 implemented interim initiatives from a study to increase the effectiveness of the programming and budgeting process and add additional emphasis to execution. This process is now known as the Planning, Programming, Budgeting and Execution (PPBE) process.

DoD has evolved from an annual Program Objective Memorandum (POM)/Budget Estimate Submission (BES) cycle to a biennial (2-year) cycle. The new PPBE process guides DoD in developing strategy; identifying needs for military capabilities; planning programs; estimating, allocating, and acquiring resources; and other decision processes. In addition, the change more closely aligns DoD's internal cycle with external requirements embedded in statutes and administration policy.

#### 6.1.C Source Documentation:

- DoDINST 7045.7, Implementation of the Planning, Programming and Budgeting System (dated 23 May 1984)
- DoN Budget Guidance Manual, Part I, Chapters 1 and 2 (October 2006) (<https://fmbweb1.nmci.navy.mil/guidance/bgm.htm>)
- MID 913, Implementation of a 2-Year Planning, Programming, Budgeting, and Execution Process (dated 22 May 2003)
- OSD Comptroller iCenter (<http://www.defenselink.mil/comptroller/icenter/index.html>)

### 6.2 Planning Phase

6.2.A Purpose. The focus of the planning phase is to: define the National Military Strategy to support national security and U.S. foreign policy two to seven years into the future; plan the military forces to accomplish that strategy; ensure the necessary framework exists to manage DoD resources effectively; and plan and negotiate goals, and revise as necessary and appropriate. A major aspect of the Planning phase is the Joint Capabilities Development process. The Joint Capabilities Development is a new approach to defense planning that focuses attention on needed capabilities while providing guidance to fit programs within the resources available to meet the defense goals. The

result is fiscally constrained programmatic guidance to accomplish the National Military Strategy and the defense goals in the Quadrennial Defense Review.

6.2.B The Quadrennial Defense Review (QDR) will continue to serve as the Department's major statement of defense strategy and business policy. It also will continue to be the single, hierarchical link throughout DoD that integrates and influences all internal decision processes. Public Law 107-314, the FY 2003 Defense Authorization Act, amends 10 USC 118 to align the QDR submission date with that of the President's Budget in the second year of an administration.

6.2.C Principle Steps in Planning process:

- The National Security Council prepares the National Security Strategy.
- The Joint Chiefs of Staff (JCS) use the National Security Strategy as guidance to develop and present the National Military Strategy.
- Combatant Commanders provide the Secretary of Defense and the JCS with appraisals of issues and major problems.
- Strategic Planning Guidance issued.
- OSD and the JCS conduct a combined examination of the major issues and performance metrics.
- OSD issues the Joint Programming Guidance document.

6.2.D Principle Planning Documents:

- National Military Strategy (NMS) – reflects JCS's and the military departments' views on the military role and posture of the U.S. and DoD in the world environment
- Strategic Planning Guidance (SPG) – provides DoD components with direction on defense policy, strategy, force and resource planning, and fiscal matters for use in developing their POMs
- Joint Planning Document (JPD) – used with the NMS to drive the planning process
- Joint Programming Guidance (JPG) – final document of the Planning process; contains fiscally constrained programmatic guidance

6.2.E Responsibility. NAVAIR is not involved in the Planning Phase.

### 6.3 Programming Phase

Flow Process: Dates listed are approximate for POM-10)

|   |                |
|---|----------------|
| POM-10 CNO Guidance:                        | November 2007  |
| POM-10 POM-10 Programming & Fiscal Guidance | January 2008   |
| POM-10 Sponsor Program Proposal (SPP) Build | Mar-Apr 2008   |
| POM-10 SPPs to N80                          | April 2008     |
| POM-10 Program Decision Memos               | September 2008 |

6.3.A Purpose. The programming phase is the period when planning decisions, programming guidance, and congressional guidance is converted into a detailed allocation of resources. The Services match their available resources against their requirements and submit program proposals, which are reviewed and alternatives are presented to the Deputy Secretary of Defense. The Service's Program Objective Memorandum (POM) is the primary document used to submit programming proposals. The POM is reviewed by program review teams comprising members from the military departments, JCS, defense agencies, and OSD staff. In addition, the Joint Chiefs conduct a concurrent checks-and-balances review of the POM, focusing on the balance and capabilities of the proposed force levels. These reviews are presented to the Secretary of Defense prior to his/her decisions in the Program Decision Memoranda (PDMs). The issuance of the PDMs completes the Programming process.

6.3.B Principle Steps in the Programming Phase:

- POMs are formulated and submitted in even-numbered on-budget years. Program Change Proposals (PCPs) are prepared and submitted in odd-numbered, off-budget years.
- The Joint Staff and OSD review teams review POM/PCP concurrently.

- Results of the review are documented in the PDM and signed by the Secretary or Deputy Secretary of Defense. Each Service receives a separate PDM.
- Issuance of the PDM concludes the Programming Phase.

6.3.C Principle Documents of the Programming Phase:

- POM – issued during the even numbered, on-budget years, contains recommended programming and resource allocations
- PCP – issued during odd numbered, off-budget years to request program changes to the baseline
- Issue Books – single page narratives prepared by OSD staff, DoD Components, and Office of Management and Budget (OMB)
- PDM – final document of the Programming process, contains decisions of the Secretary of Defense regarding programs and resources

6.3.D Source Documentation/Guidance:

- DoN Budget Guidance Manual, Part I, Chapters 1 and 2 (October 2006)  
(<https://fmbweb1.nmci.navy.mil/guidance/bgm.htm>)
- DoD Directive 7045.14, The Planning, Programming, and Budgeting System (PPBS) (dated 23 May 1984)
- MID 913, Implementation of a 2-Year Planning, Programming, Budgeting, and Execution Process (dated 22 May 2003)
- OSD Comptroller iCenter (<http://www.defenselink.mil/comptroller/icenter/index.html>)

6.3.E Responsibility. The programming phase is the responsibility of N8 (Deputy CNO for Resources, Requirements and Assessments) and the Resource Sponsors. While preparing their SPPs, Resource Sponsors consult and involve appropriate offices within DoN including the Secretariat, FMB, N80, HQMC, and budget submitting offices. Requiring financial managers in NAVAIR/PEOs are to ensure the existing program is priced accurately and provide any pricing changes to the Resource Sponsor, provide cost estimates for various program alternatives as requested, and inform the Resource Sponsor of any problems. During this phase, program offices are responsible for keeping in close contact with their Resource Sponsor and notifying him/her of their requirements.

6.3.F POC: Debbie McCann, AIR-10.3, (301) 757-7801

**6.4 Budgeting Phase:**

6.4.A Flow Process for the FY 2010 Budget

| FY 2010<br>submitted to<br>ASN(FM&C) | Issues/<br>Issue Papers | FY 2010<br>submitted to<br>OSD | OSD<br>Review | PBD/<br>Reclama | FY 2010<br>submitted to<br>Congress | FY 2009<br>Execution<br>Review |
|--------------------------------------|-------------------------|--------------------------------|---------------|-----------------|-------------------------------------|--------------------------------|
| 5 May 08                             | May-Jun 08              | 18 Jul 08                      | Aug-Nov 08    | Nov- 08         | Feb 09                              | Mar-May 09                     |

6.4.B Purpose. The Budgeting phase (formulation and justification) provides a platform for a detailed review of a program’s pricing, phasing and overall capability to be executed on time and within budget. Budgeting also prepares the programs to be developed into appropriations.

The DoN’s objective is to translate program resource requirements into a finely tuned budget request that is executable and properly priced. There are three budget cycles each year: submission to DoN (June-August), submission to OSD (August-December), and submission to Congress (January-February). DoD will formulate two-year budgets and use the off-year to focus on budget execution and program performance. With the evolution of PPBS to PPBE, and the increased emphasis on the appropriate allocation of resources and proper execution of the budget, a primary aspect of preparing budget estimates is the inclusion of performance metrics. Currently, more time is spent deciding how much to spend on a program (input) rather than on what is received for the money

(output). The Department will shift its focus to program performance and results, and then use that assessment in making budget decisions. The OSD Comptroller and Director, Program Analysis and Evaluation will review program performance to assess the degree to which budget estimates sustain and improve the programmatic results. Performance metrics will be the analytical underpinning to ascertain whether an appropriate allocation of resources exists in current budgets. A budget execution review will provide the opportunity to make assessments concerning current and previous resource allocations and whether the Department achieved its planned performance goals. To the extent performance goals of an existing program are not being met, recommendations may be made to replace that program with alternate solutions or to make appropriate funding adjustments to correct resource imbalances. Program and budget change proposals will seek to adjust current allocations of resources in order to achieve desired performance goals.

Procurement: Complies with full funding policy.

RDT&E,N: Complies with incremental funding policy.

#### 6.4.C Principle Steps in the Budgeting Phase:

- The Services conduct a review of their programs with the ultimate aim of producing a Budget Estimate Submission (BES) in even-numbered, on-budget years, or a Budget Change Proposal (BCP) in odd-numbered, off-budget years.
- The review focuses on congressional interest and direction, execution performance, and fact-of-life changes.
- The BES is submitted for a joint review by OSD and OMB on even-numbered, on-budget years. The BCP is submitted for review on odd-numbered, off-budget years.
- OSD and OMB issue Program Budget Decisions (PBDs) to modify the BES or BCP.
- The BES/BCP as modified by the PBDs, is the baseline for the DoD budget, which becomes part of the President's Budget submitted to Congress.

#### 6.4.D Principle Documents of the Budgeting Phase:

- BES – issued during even-numbered, on-budget years; contains recommended budget estimates based on aggregated inputs from operational organizations and field activities
- BCPs – issued during odd-numbered, off-budget years to request budget changes to the baseline program
- PBDs – budget decision document issued by OSD and OMB during the joint review of the Service budget submissions
- President's Budget (PB) – budget for a fiscal year, transmitted to Congress by the President by the first Monday in February

#### 6.4.E Source Documentation/Guidance:

- DoD Financial Management Regulations, Volumes 2A and 2B, Budget Formulation and Presentation (DoD 7000.14R) (<http://www.dod.mil/comptroller/fmr/>)
- DoN Budget Guidance Manual, Part I, Chapters 1 and 2 (October 2006) (<https://fmbweb1.nmci.navy.mil/guidance/bgm.htm>)
- OSD Comptroller iCenter (<http://www.defenselink.mil/comptroller/icenter/index.html>)
- Assistant Secretary of the Navy (Financial Management and Comptroller) (ASN(FM&C) budget guidance memos ([https://fmbweb1.nmci.navy.mil/guidance/bg\\_memoranda.htm](https://fmbweb1.nmci.navy.mil/guidance/bg_memoranda.htm)))

6.4.F Critical Prior Events. a) Approval for Full Rate or Low Rate Initial Production (or a waiver) must be obtained prior to executing a procurement program, and a carefully constructed and well-defined plan leading to this approval must be available to budget reviewers; and b) current acquisition documents.

6.4.G Responsibility. The NAVAIR Comptroller (AIR-10.0) and budget divisions (AIR-10.1.1, AIR-10.1.2, AIR-10.1.3, and AIR-10.1.4) are responsible for coordinating the preparation of formal NAVAIR budget requests.

The Budget Formulation, Justification and Execution Division (AIR-10.1) promulgates budget preparation guidance and budget control amounts to the preparing offices. PEOs/program managers and other offices, with the assistance of AIR-4.2 cost analysts, prepare exhibits for the various programs by appropriation, and submit them to the budget divisions for approval, compilation, and transmittal.

6.4.H Review & Approval. ASN(FM&C) reviews and approves or adjusts the NAVAIR budget submission. OSD and OMB jointly review and approve/mark budgets by issuing Program Budget Decisions (PBDs). The four Congressional oversight committees, the two joint conference committees, and both bodies of Congress review, approve/mark, and enact the President's budget.

6.4.I Lessons Learned. Reviewers at both Navy and DoD levels scrutinize pricing, status of development, program executability, prior year obligation and expenditure performance, slippage in schedules, and procurement lead-times.

6.4.J POCs:

|                              |  |
|------------------------------|--|
| Overall:                     | Debbie McCann, AIR-10.1, (301) 757-7808  |
| PEO(A)/APN:                  | Piret Kork, AIR-10.1.1, (301) 757-7814   |
| PEO(W)/NAVAIR/WPN/OPN/PANMC: | Mike Barnett, AIR-10.1.2, (301) 757-7776 |
| PEO(T)/RDT&E,N:              | Danny Lenore, AIR-10.1.4, (301) 757-7796 |
| O&M,N/O&M,NR:                | John Johnson, AIR-10.1.3, (301) 757-8351 |

## 6.5 Execution Phase:

6.5.A Flow Process:

- Congress passes Appropriation Act and President signs.
- Treasury issues appropriation warrants.
- OMB apportions funds within all appropriations.
- OSD allocates to the Services with such additional restrictions on execution as the Secretary of Defense may direct.
- ASN(FM&C) allocates to OPNAV; OPNAV allocates to NAVAIR and PEOs.
- AIR-10.0 allocates funds to accounts of cognizant managers .
- NAVAIR:
  - Make direct contracts with business
  - Issue allotments, Work Requests, Project Orders, Expense Operating Budgets, and other funding documents as required to subdivide allocated funds to Navy activities performing work
  - Issue Interdepartmental Purchase Requests (IPRs)/Military IPRs (MIPRs) to activities outside Navy

6.5.B Purpose. Current year budget execution begins on 1 October. During execution, funds are allocated, obligated, and expended to accomplish DoD's plan. In addition, execution entails the rigorous monitoring and reporting of actual results to budgeted, anticipated results, along with causes of variances and planned corrective actions. Execution is that phase of the budget cycle which encompasses all the actions required to accomplish effectively, efficiently, and economically the programs for which funds were requested and approved.

6.5.C Source Documentation: Allocation documents

- OSD Comptroller iCenter, <http://www.defenselink.mil/comptroller/icenter/index.html>

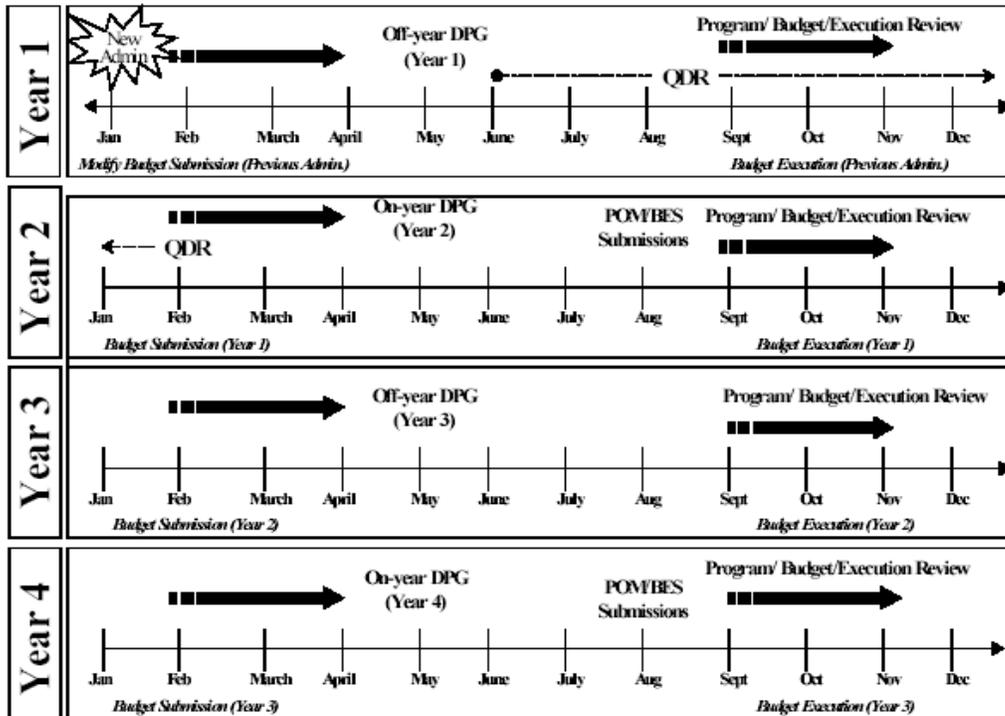
6.5.D Critical Prior Events. a) Acquisition Plan approval; b) Initiation of the PID must take into consideration administrative lead-time to prepare, route, and process by the contracting officer in order to meet the PMAs/RFM's required contract award date; c) If sole source, J&A approval; d) Funding when ready for contract signature; and e) ECP submitted and approved in time to allow contract award by mid-fiscal year.

6.5.E Responsibility. As administering offices, AIR-10.1.1, AIR-10.1.2, AIR-10.1.3, and AIR-10.1.4 control the allocation and availability of funds as well as maintain the integrity and propriety of NAVAIR and PEO funds, and approve all financial encumbrances which are then recorded in SIGMA. Requiring financial managers (RFMs), now called Fund Centers, are responsible for all transactions necessary to their programs. AIR-2.0 negotiates headquarters contracts, and various field and other components negotiate and administer their respective contracts as well as perform services, fabricate end items, or undertake a variety of research and development efforts.

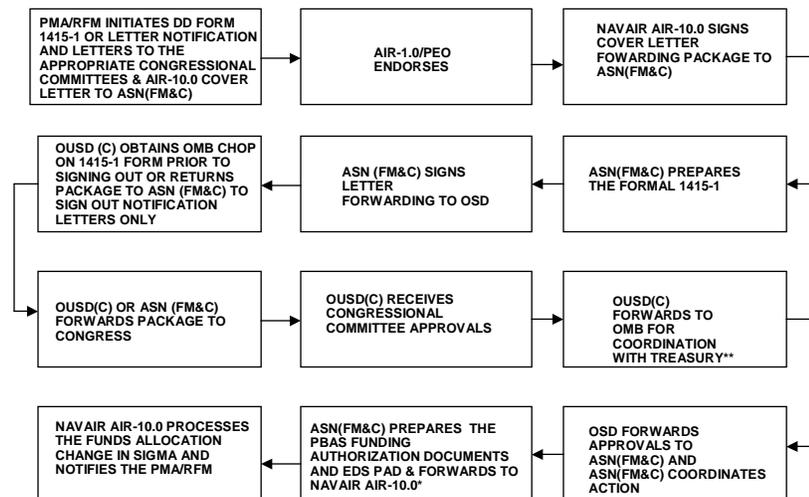
6.5.F Lessons Learned. Early execution planning and close monitoring of execution performance, with a stress on expenditures, are imperative.

6.8.G POCs: Same as Budgeting Phase

## 4 Years in the 2-Year Cycle



## Routing for Prior Approval Reprogramming



Note: \* ONR forwards the PBAS Funding Authorization Documents/2197 to NAVAIR AIR-10.0 when these actions are approved and R&D funding is involved.

\*\* If reprogramming between appropriations

## CHAPTER VII: MILESTONE REVIEW/APPROVAL PROCESS

### PART A: ACQUISITION CATEGORIES AND ABBREVIATED ACQUISITION PROGRAMS

7.1 Purpose. Navy acquisition programs are categorized at the time of program initiation as one of four acquisition categories (ACATs) or as an Abbreviated Acquisition Program. Also, modifications and upgrades to programs out of production should be designated as either new start ACAT programs or Abbreviated Acquisition Programs. The ACAT categories, besides establishing the overall visibility of a given program, are used to determine the level of a program's milestone decision authority and, to some extent, the documentation/information requirements associated with the program.

#### 7.2 Source Documents:

DoDI 5000.2, encl (2)

SECNAVINST 5000.2D, encl (2) and the DoN Acquisition and Capabilities Guidebook, encl (2)

7.3 Definition. The defining criteria and associated milestone decision authority (MDA) for each ACAT level, both for weapon systems and information technology programs, are shown in the table at the end of this Part. Unless otherwise stated, dollar criteria shown in the table are cumulative for the entire life, or anticipated life, of the program.

#### 7.4 Abbreviated Acquisition Programs

7.4.A SECNAVINST 5000.2D, section 2.4.6 of encl (2), provides for a category of acquisition programs that are not within the ACAT system. These programs, called Abbreviated Acquisition Programs, must meet all of the following criteria:

- 1) Do not require operational test and evaluation, as concurred with in writing by the appropriate Operational Test Agency.
- 2) For weapon systems programs,
  - a. have total development costs of less than \$10 million for the life of the program, and
  - b. have total procurement/services costs of less than \$50 million for the life of the program, and
  - c. have total procurement/services costs of less than \$25 million for each year of the program.

7.4.B An ACAT program or a potential ACAT program may not be artificially divided into separate entities for the purpose of qualifying as several Abbreviated Acquisition Programs in the place of the one ACAT program. ASN(RD&A) or the cognizant SYSCOM, PEO, or DRPM may, for reasons of visibility or other circumstances, elect to designate as an ACAT program any program that otherwise qualifies as an Abbreviated Acquisition Program.

7.4.C Each SYSCOM, PEO, and DRPM shall be responsible for developing its own policies and procedures for Abbreviated Acquisition Program reviews, documentation, tracking, and designation of program decision authority. Decision authority for Abbreviated Acquisition Programs will normally be delegated to the program manager (PM). Such programs shall not be initiated without funding and a written requirement authorized by CNO/CMC.

#### 7.5 ACAT Designation and Designation Change Requests

7.5.A Program managers are responsible for ensuring that all acquisition programs they are managing, including upgrades to out of production systems, have either an assigned ACAT or are otherwise designated as an Abbreviated Acquisition Program. To request an ACAT designation, PM's should prepare a memorandum to the designating authority using the format found in the DoN Acquisition and Capabilities Guidebook, encl (2), Annex 2-E. If a PM believes that a program has been assigned an incorrect ACAT designation, or if reasons such as revised cost estimates, adjustments to procurement quantities, or directed program changes warrant an ACAT

change, a change request should be submitted using the format cited in the previous sentence. Both types of requests should be forwarded by the PM to the appropriate ACAT designating authority:

| <u>ACAT Level</u> | <u>ACAT Designating Authority</u>   |
|-------------------|---|
| ID                | Under Secretary of Defense (Acquisition, Technology, and Logistics)<br>(USD (AT&L))     |
| IAM and IAC       | Assistant Secretary of Defense (Networks and Information Integration)<br>(ASD (NII))    |
| IC and II         | Assistant Secretary of the Navy (Research, Development, and<br>Acquisition) (ASN(RD&A)) |
| III and IVT/IVM   | Cognizant SYSCOM/PEO/DRPM   |

7.5.B In those situations where an ACAT IV or an Abbreviated Acquisition Program designation is being requested, the request needs the concurrence of the Commander, Operational Test and Evaluation Force (COMOPTEVFOR) or the Marine Corps Operational Test and Evaluation Agency (MCOTEA) as to whether operational test and evaluation is needed. If such testing is needed, the program will be designated as an ACAT IVT, regardless of the funding amounts involved.

#### 7.6 Lessons Learned.

7.6.A For most programs, the formal ACAT designation is made at Milestone B (program initiation), but usually long before Milestone B it is recognized at what ACAT level the program will eventually end up and who the decision authority will be.

7.6.B It should be noted that the ACAT IV category is only used by the Navy and Army; DoD and the Air Force only recognize ACAT I, II, and III designations. The Abbreviated Acquisition Program category is strictly a Navy concept.

7.7 Rapid Deployment Capability (RDC). RDC procedures can be found in SECNAVINST 5000.2D, encl (2), paragraph 2.8. RDC will enable very quick fielding of a limited number of units of a new system to meet urgent requirements based on combat or potential combat situations, or for safety considerations. It is envisioned that most RDC procurements would evolve into a typical ACAT program after the initial urgent requirement is met.

7.8 POC: Lola Scott, AIR-1.1, (301) 757-7228

| <b>Acquisition Category</b>     | <b>Criteria for ACAT or AAP Designation</b>   | <b>Decision Authority</b>   |
|---------------------------------|---|---|
| ACAT I                          | <ul style="list-style-type: none"> <li>Major Defense Acquisition Programs (MDAPs) (10 USC 2430) <ul style="list-style-type: none"> <li>RDT&amp;E total expenditure &gt; \$365 million in FY 2000 constant dollars, or</li> <li>Procurement total expenditure &gt; \$2.190 billion in FY 2000 constant dollars, or</li> </ul> </li> <li>USD(AT&amp;L) designation as special interest</li> </ul>   | ACAT ID: USD(AT&L)<br>ACAT IC: SECNAV, or if delegated, ASN(RD&A) as the CAE  |
| ACAT IA                         | <ul style="list-style-type: none"> <li>Major Automated Information Systems (MAISs) <ul style="list-style-type: none"> <li>Program costs/year (all appropriations) &gt; \$32 million in FY 2000 constant dollars, or</li> <li>Total program costs &gt; \$126 million in FY 2000 const. dollars, or</li> <li>Total life-cycle costs &gt; \$378 million in FY 2000 constant dollars</li> </ul> </li> <li>ASD(NII) designation as special interest</li> </ul>   | ACAT IAM: ASD(NII)/DoD CIO<br>ACAT IAC: ASN(RD&A), as delegated by ASD(NII)   |
| ACAT II                         | <ul style="list-style-type: none"> <li>Does not meet the criteria for ACAT I</li> <li>Major Systems (10 USC 2302(5)) <ul style="list-style-type: none"> <li>RDT&amp;E total expenditure &gt; \$140 million in FY 2000 constant dollars, or</li> <li>Procurement total expenditure &gt; \$660 million in FY 2000 constant dollars, or</li> </ul> </li> <li>ASN(RD&amp;A) designation as special interest</li> <li>Not applicable to IT system programs</li> </ul>  | ASN(RD&A), or the individual designated by ASN(RD&A)  |
| ACAT III                        | <ul style="list-style-type: none"> <li>Does not meet the criteria for ACAT II or above</li> <li>Weapon system programs: <ul style="list-style-type: none"> <li>RDT&amp;E total expenditure ≤ \$140 million in FY 2000 constant dollars, or</li> <li>Procurement total expenditure ≤ \$660 million in FY 2000 constant dollars, and</li> <li>Affects mission characteristics of ships or aircraft or combat capability</li> </ul> </li> <li>IT system programs: <ul style="list-style-type: none"> <li>Program costs/year ≥ \$15 million ≤ \$32 million in FY 2000 constant dollars, or</li> <li>Total program costs ≥ \$30 million ≤ \$126 million in FY 2000 constant dollars, or</li> <li>Total life-cycle costs ≤ \$378 million in FY 2000 constant dollars</li> </ul> </li> </ul> | Cognizant PEO, SYSCOM Commander, DRPM, or designated flag officer or senior executive service (SES) official.<br><br>ASN(RD&A), or designee, for programs not assigned to a PEO, SYSCOM, or DRPM. |
| ACAT IVT                        | <ul style="list-style-type: none"> <li>Does not meet the criteria for ACAT III or above</li> <li>Requires operational test and evaluation</li> <li>Weapon system programs: <ul style="list-style-type: none"> <li>RDT&amp;E total expenditure ≤ \$140 million in FY 2000 constant dollars, or</li> <li>Procurement total expenditure ≤ \$660 million in FY 2000 constant dollars</li> </ul> </li> <li>IT system programs: <ul style="list-style-type: none"> <li>Program costs/year &lt; \$15 million, or</li> <li>Total program costs &lt; \$30 million, or</li> <li>Total life-cycle costs ≤ \$378 million in FY 2000 constant dollars</li> </ul> </li> </ul>   | Cognizant PEO, SYSCOM Commander, DRPM, or designated flag officer, SES official, or PM.<br><br>ASN(RD&A), or designee, for programs not assigned to a PEO, SYSCOM, or DRPM.                       |
| ACAT IVM                        | <ul style="list-style-type: none"> <li>Does not meet the criteria for ACAT III or above</li> <li>Does not require operational test and evaluation as concurred with by OTA</li> <li>Weapon system programs: <ul style="list-style-type: none"> <li>RDT&amp;E total expenditure ≥ \$10 million ≤ \$140 million in FY 2000 constant dollars, or</li> <li>Procurement expenditure ≥ \$25 million/year, ≥ \$50 million total ≤ \$660 million total in FY 2000 constant dollars</li> </ul> </li> <li>Not applicable to IT system programs</li> </ul>   | Cognizant PEO, SYSCOM Commander, DRPM, or designated flag officer, SES official, or PM.<br><br>ASN(RD&A), or designee, for programs not assigned to a PEO, SYSCOM, or DRPM.                       |
| Abbreviated Acquisition Program | <ul style="list-style-type: none"> <li>Does not meet the criteria for ACAT IV or above</li> <li>Does not require operational test and evaluation as concurred with in writing by OTA</li> <li>Weapon system programs: <ul style="list-style-type: none"> <li>Development total expenditure &lt; \$10 million, and</li> <li>Production or services expenditure &lt; \$25 million/year, &lt; \$50 million total</li> </ul> </li> <li>IT system programs: <ul style="list-style-type: none"> <li>Program costs/year &lt; \$15 million, and</li> <li>Total program costs &lt; \$30 million</li> </ul> </li> </ul>   | Cognizant PEO, SYSCOM Commander, DRPM, or designated flag officer, SES official, or PM.<br><br>ASN(RD&A), or designee, for programs not assigned to a PEO, SYSCOM, or DRPM.                       |

## **CHAPTER VII: MILESTONE REVIEW/APPROVAL PROCESS**

### **PART B: ACQUISITION MILESTONES AND PHASES**

7.9 Discussion. Acquisition milestone decision points provide a basis for the comprehensive management and progressive decision making associated with program maturation. At each milestone, the Milestone Decision Authority (MDA) is provided by the program manager with a formal presentation on the program's progress to date. The MDA then provides direction as necessary and makes a decision as to whether to authorize the program to proceed to the next phase of the acquisition life cycle.

#### 7.10 Source Documents:

DoDI 5000.2  
SECNAVINST 5420.188F  
NAVAIRINST 5000.20

7.11 New Model versus Old Model. DoN new start ACAT program shall follow the "new" acquisition life-cycle model established by DoDI 5000.2 in October 2000. Ongoing ACAT programs started under the pre-23 October 2000 "old" acquisition model, and which had not yet reached Milestone II as of 12 May 2003, the issue date of the current DoDI 5000.2, are required to convert to the new acquisition model at the start of System Development and Demonstration (Milestone B). However, ongoing programs started under the pre-23 October 2000 old model and which were past Milestone II as of 12 May 2003 may continue to a Milestone III, but in so doing shall satisfy all the current statutory and regulatory requirements associated with a Full Rate Production decision. The diagram at the end of this chapter/part provides a general comparison of the old and new models, showing how the milestone and phases in each model line up with those in the other model.

7.12 Milestone Tailoring. Many programs, particularly those designated ACAT III or IV, can be executed with tailored schedules that reduce the number of formal milestones and/or acquisition phases. Many if not most ACAT IIIs and IVs will not have a formal Milestone A, and those that are based on a commercial off-the-shelf (COTS) may not need a Milestone B and a Systems Development and Demonstration Phase. The tailoring of program schedules and the elimination of one or more formal milestone reviews or phases must be approved by the MDA early in the program's life cycle.

#### 7.13 Milestone Approval.

7.13.A Final approval for a program to pass a milestone and enter into the next phase of the acquisition process is decided by the MDA, who differs depending on the ACAT level of the program. For ACAT ID programs, the final decision is made by the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L)) at a Defense Acquisition Board (DAB). For Navy ACAT IC and II programs, the MDA is exercised by the Assistant Secretary of the Navy for Research, Development and Acquisition (ASN(RD&A)) at a Navy Program Decision Meeting (NPDM). A formal review at which a milestone decision is not being made will be referred to as a Program Review (PR). The NPDM and PR procedures are found in SECNAVINST 5420.188F of 2 Nov 2005. For weapons system ACAT III and ACAT IV programs, the MDA has been delegated to the SYSCOM/PEO level. Milestone reviews for ACAT III and IV programs are also referred to as NPDMs. The scheduling of milestone reviews should be arranged by the PM's office with the MDA's office.

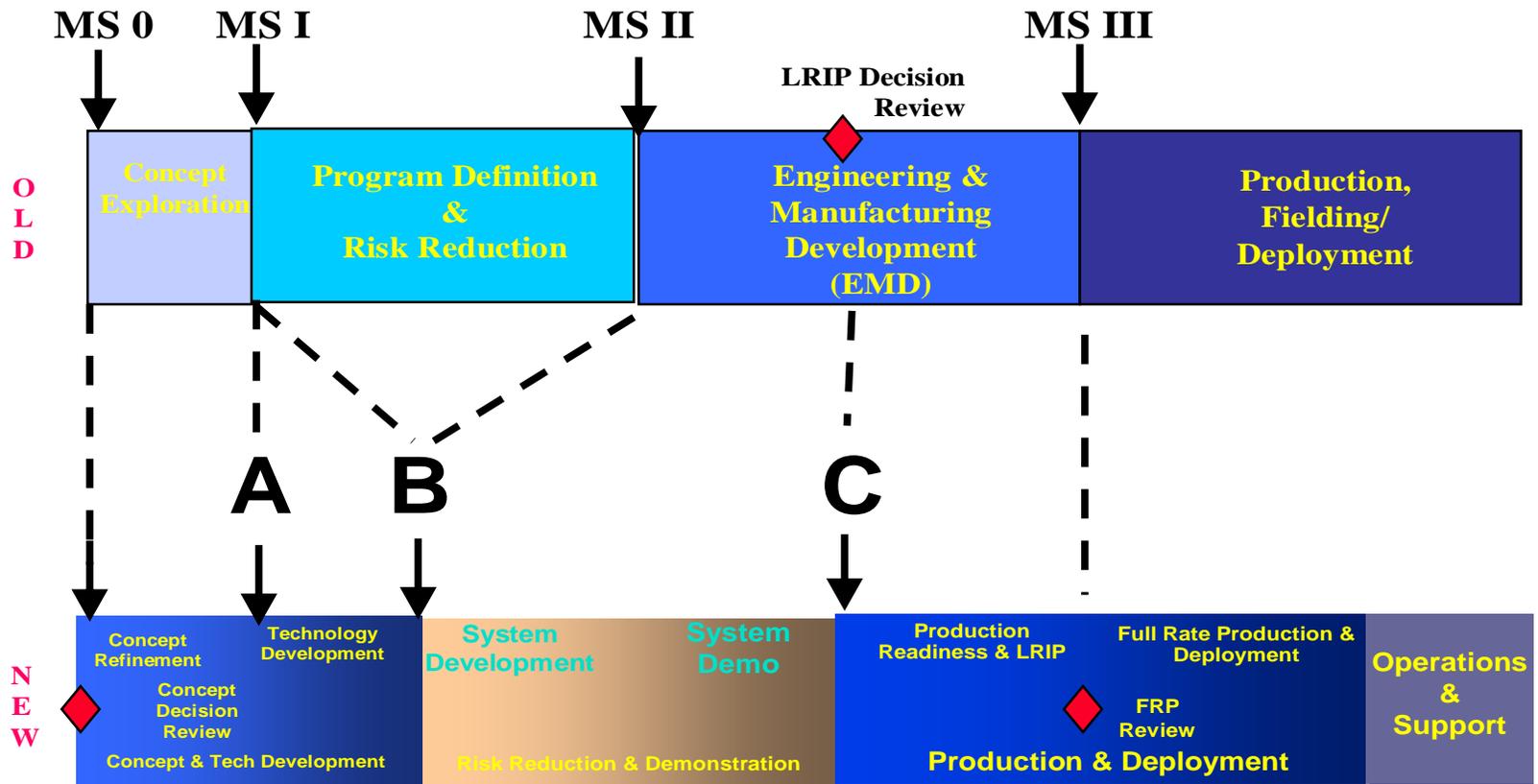
7.13.B For ACAT I and II programs that have the MDA at a higher level than the PEO or SYSCOM, arrangements for an NPDM, chaired by ASN(RD&A), should be made by the PM's office with the office of the Deputy Assistant Secretary for Air Programs (ACAT ID programs are also reviewed by an ASN(RD&A) chaired NPDM before proceeding to a Defense Acquisition Board (DAB) review at the USD(AT&L) level). Prior to proceeding to an NPDM, ACAT I and II programs are usually reviewed by the cognizant PEO or AIR-1.0 at an Acquisition Review Board (ARB). NAVAIR ARB procedures are covered in NAVAIRINST 5000.20 of 21 Feb 2003. PMs should consult with their program's PEO/AIR-1.0 acquisition support staff on administrative procedures for scheduling and conducting ARBs.

7.13.C For Naval Aviation weapon system ACAT III and IV programs, the MDA is either the cognizant PEO or, for those programs not managed within one of the PEO organizations, NAVAIR's Assistant Commander for Acquisition (AIR-1.0). Direction on the conducting of ACAT III and IV milestone reviews can be found in NAVAIRINST 5000.20; in addition each of the PEOs and AIR-1.0 has internal policies for conducting milestone and pre-milestone reviews.

7.13.D Actual milestone approval is recorded in an Acquisition Decision Memorandum (ADM) that is prepared by the MDA's acquisition staff and signed by the MDA. The ADM authorizes the program to proceed to the next acquisition phase, provides specific direction to the program manager, and establishes exit criteria, which are critical results or events that must be attained in order to exit the next acquisition phase prior to proceeding to the next milestone. Per SECNAVINST 5420.188F, the program manager should propose the exit criteria for the next acquisition phase at the conclusion of the milestone review presentation.

7.14 An automated NAVAIR/PEO Acquisition Review Board/Navy Program Decision Meeting schedule is maintained by Florine James, AIR-1.1, (301) 757-9010.

# MODEL COMPARISONS



## CHAPTER VII: MILESTONE REVIEW/APPROVAL PROCESS

### PART C: INTEROPERABILITY

7.15 Interoperability Certifications. There are three required interoperability-related certifications, issued by the Joint Staff C4 Systems Directorate (J-6): (1) interoperability & supportability certification (based on the capability documentation (CDD/CPD)), (2) Net-Ready Key Performance Parameter (NR-KPP) certification (based on the Information Support Plan (ISP)), and (3) system validation (based on Joint Interoperability Test Command (JITC)-certified interoperability testing results). The first two are performed prior to both acquisition milestones B and C, while the third occurs concurrent with or subsequent to developmental/operational testing (see “Interoperability Testing” below).

7.15.A The interoperability & supportability certification results from a successful Joint Staff J-6-led review of the capabilities document(s) for conformance with policy, doctrine, and applicable interoperability standards for joint IT and NSS. The review processes are managed using a web-based software tool (see “ISP Assessment Tool” below).

7.15.B The ISP/NR-KPP certification verifies that IT and NSS programs of all ACATs adequately address infrastructure requirements, dependencies and interface requirements between systems, the availability of bandwidth and spectrum support, and implementation of the DoD Net-Centric Data Strategy, including compliance with the Net-Centric Operations and Warfare Reference Model (NCOW RM). J-6 reviews, comments on, and certifies ISPs to the Assistant Secretary of Defense for Networks & Information Integration (ASD(NII)) using the ISP/NR-KPP certification process (see “Information Support Plans” below).

7.15.C JITC-certified interoperability testing evaluates the operational status of the NR-KPP requirements (including interfaces, enterprise-level exchange requirements, and other interoperability requirements). Once the standards conformance and interoperability assessments are completed, and JITC has issued a Joint Interoperability Test Certification, J-6 will issue the System Validation.

7.16 Interoperability Testing. (The following text is extracted from CJCSI 6212.01D, Encl. E) “All Information Technology (IT) and National Security Systems (NSS) must be evaluated and certified by the Defense Information Systems Agency (DISA) Joint Interoperability Test Command (JITC). All systems – Acquisition Category (ACAT), non-ACAT, and fielded systems – must be evaluated and certified prior to (initial or updated) fielding, and periodically during their entire life – as a minimum, every 3 years. JITC Joint Interoperability Test Certification is based on Joint Staff J-6 certified Net-Ready Key Performance Parameters (NR-KPPs) and other approved requirements. Testing associated with evaluations may be performed in conjunction with other testing (i.e., Developmental Test & Evaluation (DT&E), Operational T&E (OT&E)) to conserve resources. ... When JITC is not the responsible testing organization, the system sponsor (for DT) or appropriate Operational Test Agency (OTA) (for OT) will coordinate test plans, analysis, and reports with JITC to ensure sufficient information is available to support a certification determination.” For further details, refer to Enclosure E of CJCSI 6212.01D.

7.17 ISP Assessment Tool. The Joint C4I Program Assessment Tool – Empowered (JCPAT-E), operated and maintained by the Defense Information Systems Agency (DISA), supports document submission, assessor review and comment submission, collaborative workspace, and consolidated review comment rollup. The JCPAT-E is maintained on two websites—one on NIPRNET (<https://jcpat.disa.mil/JCPAT/>), and one on the SIPRNET (<https://austria.ncr.disa.smil.mil/JCPAT/>). Unclassified ISPs may be submitted via either the NIPRNET or the SIPRNET site, however the subsequent comment resolution matrices and J-6 interoperability & supportability certification memoranda are posted only via the SIPRNET JCPAT-E. Also, all data remaining on the NIPRNET JCPAT-E pertaining to the review of a document is transferred to the SIPRNET site and purged after 30 days. Hence, research into historical document submissions can only be done via the SIPRNET. The Navy POC for JCPAT-E entry is ASN(RD&A) CHSENG, Mr. Doug Merritt, (407) 380-8447. Program management offices may elect to access the ISP Assessment Tool directly for submission of ISPs and subsequent monitoring of their review progress. Access is controlled by user ID and password and may be requested via a link on the website(s). Requestors must have a referral from a current JCPAT-E registered user.

7.18 Information Support Plans. The ISP analyzes the scope of external C4ISR interfaces and information support required by the program, as presented in the NR-KPP. It examines the data flows and system dependencies, and the ability of the identified external programs/systems to provide necessary support, to determine potential interoperability problems. The ISP also identifies external C4ISR support that must be provided to conduct the development phase, and to execute both the TEMP and the training plan. If any issues are discovered, they are documented in the ISP along with the PM's mitigation strategies. The ISP operational concept and operational requirements are taken from the CDD/CPD NR-KPP, as are the bulk of the C4ISR architecture products. An initial ISP is due, along with the CDD, prior to Milestone B, to provide the basis for the initial supportability and NR-KPP certification processes. The ISP is submitted for DoD/Joint assessment via the OASD(NII) ISP tool (see above). For further details on ISP preparation and submission, refer to Chapter VIII, Part C of this Guide.

7.19 POC: Ken Ives, Air Systems Interoperability, AIR-4.1.1.7, (301) 757-3257

## CHAPTER VIII: PROGRAM AUTHORIZATION PROCESS

### PART A: ACQUISITION STRATEGY

8.1 Purpose. The Acquisition Strategy serves as the roadmap for program execution from program initiation through post-production support. Essential elements include, but are not limited to, a summary description of the requirements, the overall acquisition approach including the use of evolutionary acquisition, risk management, program management including resources and oversight, interoperability, the use of open systems, the support strategy, and the contracting strategy. The Acquisition Strategy shall be tailored to meet the specific needs of individual programs. An Acquisition Strategy is now also required for acquisitions of services to ensure adequate planning and oversight (see Chapter XV, Part K on the Management and Oversight Process for the Acquisition of Services (MOPAS)).

#### 8.2 Source Documents:

The Defense Acquisition Guidebook, Section 2.3  
SECNAVINST 5000.2D, encl 3, Section 3.4  
DoN Acquisition and Capabilities Guidebook, encl (3), Section 3.4

8.3 When Required. A program's MDA will approve the program's initial Acquisition Strategy prior to the beginning of Milestone B or at whatever point program initiation occurs. An updated, approved Acquisition Strategy is generally required in association with each subsequent milestone and the full rate production decision, or whenever there is a significant change to a previously approved Acquisition Strategy.

8.4 Responsibility. The program manager is responsible for the timely preparation and submittal of the Acquisition Strategy. The PM shall develop the Acquisition Strategy in coordination with the program's Integrated Program Team. The PEO shall concur in the Acquisition Strategy, and the MDA shall approve the Acquisition Strategy prior to release of a formal solicitation.

8.5 Format. There is no longer a required Acquisition Strategy format. However, the above listed source document references provide a detailed description of topics that should be considered for inclusion in the Acquisition Strategy. PMs are to tailor the Acquisition Strategy to each individual program's needs and the expectations of the program's MDA. The requirement for MDA Acquisition Strategy approval can actually be met via a briefing to which the MDA gives verbal or written consent, as opposed to an actual Acquisition Strategy document; however, this approach is rarely used and only with the prior approval of the MDA. The guidance on the automated AP/ASR template can be found at <https://home.navair.navy.mil/pmwebtool>.

#### 8.6 Lessons Learned

8.6.A In preparing the Acquisition Strategy, the PM should rely on support from cognizant elements of the various competencies. In addition, draft copies of the Acquisition Strategy should be coordinated with the cognizant PEO/AIR-1.0 acquisition support staff. PMs should allow sufficient time for preparation and approval; generally, the higher the ACAT level the greater the amount of time should be budgeted for preparation and the necessary staffing prior to approval.

8.6.B If so desired, PMs can use the Acquisition Plan (AP) as the vehicle to obtain MDA approval of a program's Acquisition Strategy. Such a consolidation is more practical in the case of ACAT III and IV programs, where the AP approval level (PEO or AIR-1.0) is the same as the Acquisition Strategy approval level (MDA). See Part B of this Chapter for more detail on APs.

8.7 POC: Lola Scott, AIR-1.1, (301) 757-7228

## CHAPTER VIII: PROGRAM AUTHORIZATION PROCESS

### PART B: ACQUISITION PLAN (AP)

8.8 Purpose. The Acquisition Plan (AP) is the principal document for in-depth program planning, review, and oversight.

8.9 Source Document/Guidance:

Defense Federal Acquisition Regulations Supplement (DFARS) subpart 207.1 (provides overall policy, including dollar threshold requirements) at [http://www.acq.osd.mil/dpap/dars/dfars/html/current/207\\_1.htm](http://www.acq.osd.mil/dpap/dars/dfars/html/current/207_1.htm)

DFARS's Procedures, Guidance, and Information (PGI) 207.1 (provides AP content guidance) at [http://www.acq.osd.mil/dpap/dars/pgi/pgi\\_hm/PGI207\\_1.htm](http://www.acq.osd.mil/dpap/dars/pgi/pgi_hm/PGI207_1.htm)

NAVAIRINST 4200.36D and the AIR-1.0 Acquisition Plan Policy Changes memo of 7 Aug 07 (provide guidance on preparation and coordination of APs for NAVAIR and Naval Aviation PEO programs). NAVAIRINST 4200.36D can be found at <http://mynavair.navair.navy.mil/> and the AIR-1.0 Acquisition Plan Policy Changes memo at <http://home.navair.navy.mil/pmwebtool/>.

8.10 Critical Prior Events. APs will not be approved unless there is documentation, usually in the form of a capabilities/requirements document, approved by the OPNAV sponsor. APs for ACAT programs cannot be approved unless the program has an Acquisition Strategy, which is approved by the milestone decision authority (MDA), although for some programs (particularly ACAT IIIs and IVs) the Acquisition Strategy and AP may be combined if the MDA allows.

8.11 When Required

8.11.A While AP approval is contingent upon prior approval of the capabilities/requirements document and the Acquisition Strategy, development of the AP should begin as soon as the program need is identified, and preferably well in advance of the fiscal year in which initial contract award is necessary. An approved AP is absolutely required for contract award.

8.11.B Per the DFARS, APs are required for development programs with a total value of \$10M or more, and production/service programs with a total value of \$50M or more, or with a value of \$25M or more in any one fiscal year (for these figures, no FY constant dollar year is specified in the DFARS). Information Technology programs also fall under these AP requirement thresholds.

8.11.C The AP is not required for a final buy-out (documented last buy of material or services at a point in time, fully funded, for which no documented foreseeable requirement exists) or a one-time buy. Neither a multi-year contract nor contracts with options/phases are to be considered a final buy-out or a one-time buy. See NAVAIRINST 4200.36D for the categories of programs for which APs which were previously exempt, but which now may be tailored as to content (per Navy Marine Corps Acquisition Regulations Supplement (NMCARS) 5207.103(d)(i) at [http://acquisition.navy.mil/policy\\_and\\_guidance/nmcars\\_nmcag](http://acquisition.navy.mil/policy_and_guidance/nmcars_nmcag).

8.11.D When Foreign Military Sales requirements cause a program to meet the above dollar thresholds, an AP is required.

8.12 Responsibility

8.12.A The program manager (i.e., the official who provides overall management, direction, control, resource utilization, and integration of a system or item to be purchased) is responsible for seeing that the AP is prepared and submitted for approval in a timely manner.

8.12.B In preparing the AP, the program manager should rely on his or her Integrated Program Team (IPT) members and their respective competencies for contracting, engineering, logistics, cost, security, business-financial, training, production management, testing, counsel, and any other support required.

8.12.C If separate documents (such as the Systems Engineering Plan, Acquisition Strategy, Acquisition Logistics Support Plan, Test and Evaluation Master Plan, etc) address in detail subjects included in the AP content requirements, statements on those subjects given in the AP should be very concise and only provide “highlights” of the program’s approach to that area and refer to the cognizant document. More detailed explanations or descriptions that are covered elsewhere in separate documents should not be duplicated in the AP. When appropriate, the team should coordinate development of the draft AP with AIR-4.1C, the Policy and Standardization Competency; AIR-4.0P for flight clearance requirements; AIR-6.8.5 for the Technical Data Package (TDP); NAVICP; and the Aviation Support Equipment Program Office (PMA260) for Consolidated Automated Support System (CASS) support.

8.13 Format. There is no mandatory AP format (see NAVAIRINST 4200.36D). However, APs should address each of the requirements cited in FAR 7.105 and DFARS PGI 207.105.

8.14 Review & Approval. Once completed and concurred with by the IPT, the AP is submitted for signature by the program manager, the procuring contracting officer, and either the chief of the contracting office for NAWC acquisitions supporting non-NAVAIR/non-PEO programs or the cognizant AIR-2.0 SES department head for all acquisitions supporting AIR-1.0/PEO programs, will sign/concur on the AP signature page (e.g., non-PEO/Non-AIR1.0 Program > \$50M shall be signed by AIR-2.0/A via AIR-2.5 for NAWC APs and for non-PEO/Non-AIR1.0 Programs < \$50M by the Chief of the Contracting Office).

#### 8.15 Revisions

8.15.A The program manager should review the AP annually to see if a revision is necessary. Specific guidance on what constitutes a revision is provided in paragraph 11 of NAVAIRINST 4200.36D.

8.15.B If the extent of changes to a program warrants a complete rewrite of the AP, an entirely new document will need to be written, reviewed and staffed, and approved.

8.15.C For a less than complete rewrite, an AP revision may be forwarded for approval in memorandum format explaining the nature of the change(s), including as an enclosure those pages of the original AP that have been changed. A vertical line in the margin and a date in the upper right hand corner will indicate the changed parts. Review of the change memorandum may be confined to those codes responsible for or affected by the particular functional areas being changed. If the change(s) are significant or have an impact on the program’s acquisition or contracting strategy, the same signatures as on the original AP will be required on the change memorandum. However, if the change(s) are relatively minor and the acquisition/contracting strategy is not being altered, the program manager should consult with the respective PEO acquisition staff to determine who needs to sign the change memorandum.

#### 8.16 Lessons Learned:

8.16.A The AP should, whenever possible, reflect a minimum of three years of program effort. The signature page should state the contract years which are covered by the AP and when (FY or milestone) the next revision is planned for or anticipated.

8.16.B The use of past performance as a source selection factor should be cited, when applicable, in the AP. It can be mentioned in those paragraphs of the AP dealing with proposed sources and basis for selection, small business consideration, competition, source selection procedures, other contract/business considerations and risks.

8.16.C Be sure to have an approved Acquisition Strategy for an ACAT program prior to submitting the AP for final approval. The AP cannot be approved without it. Ensure there is no conflicting information between the AP and the Acquisition Strategy. For some programs, particularly those for which the PEO and MDA are the same (ACAT III and IV), the Acquisition Strategy and AP may be combined into one document.

8.17 POC: Florine James, AIR-1.1, (301) 757-9010

## CHAPTER VIII: PROGRAM AUTHORIZATION PROCESS

### PART C: INFORMATION SUPPORT PLAN (ISP)

8.18 Purpose. As stated in DoDI 4630.8, “The ISP provides a means to identify and resolve implementation issues related to an acquisition program’s IT and NSS information infrastructure support and information interface requirements. It identifies IT and information (including intelligence) needs, dependencies, and interfaces for programs in all acquisition and non-acquisition categories, focusing on net-readiness, interoperability, information supportability, and information sufficiency concerns.”

#### 8.19 Source Documents:

DoDI 4630.8, 30 Jun 04

CJCSI 6212.01D, 8 Mar 06

Defense Acquisition Guidebook [online] (<http://akss.dau.mil/dag/>)

DoDI 5000.2, 12 May 03

SECNAVINST 5000.2D

ASN(RD&A) Memorandum, “Department of the Navy (DON) Information Support Plans (ISPs),” 11 Dec 06

DoD Architecture Framework (DoDAF), Version 1.5, 23 Apr 07 (promulgation memo: 30 Aug 2007)

OASD(NII) Memorandum, “Information Support Plan (ISP) Acquisition Streamlining Pilot Program,” 26 Aug 05

NAVAIR Standard Work Package, SWP4117-001, “Information Support Plan Review and Approval,” 28 Jul 08

NAVAIR Standard Work Package, SWP4117-002, “Information Support Plan Development and Update” [draft]

8.20 Background. CJCSI 6212.01D defines ISPs and provides specific guidance for their submission, and describes the supportability assessment and certification processes. It also provides the criteria against which submitted ISPs will be evaluated (in Encl D). DoDI 4630.8, Encl 4 contains mandatory procedures and formats for ISPs. These procedures and formats are fleshed out and illustrated in Chapter 7 of the Defense Acquisition Guidebook. DoDI 5000.2 ties the development and submission of ISPs to milestone decision reviews in the defense acquisition management process, for all Acquisition Category (ACAT) programs. SECNAVINST 5000.2D implements the DoD ISP policy and procedures for the Navy. ASN(RD&A) Memorandum, “Department of the Navy (DON) Information Support Plans (ISPs),” 11 Dec 06 modifies the SECNAVINST 5000.2D ISP guidance by assigning ASN(RD&A) Chief Systems Engineer (CHSENG) as the DON Principal POC for ISP issues, processes, and policies.

8.21 Primary Uses. The process of creating an ISP forces a critical examination of the interfaces external to, and the information support required by, the platform/system. This examination brings to light existing or potential shortfalls that could hamper overall system success, as measured against the operational requirements in the CDD/CPD (i.e., the Net-Ready Key Performance Parameter (NR-KPP)). These interoperability and supportability issues are then addressed by the relevant combatant commands/ staffs/agencies (CC/S/As) early in the acquisition process, so that cost-effective solutions with broad applicability may be found. The ISP then continues to be a “living document”—incorporating changes to the system’s capabilities, its operating environment, and employment concepts—all the while facilitating re-assessment of interoperability and supportability.

8.22 Development. To assist program managers in meeting the requirements of the above policies, NAVAIR has established an Air Systems Interoperability Division within the Systems Engineering department (AIR-4.1.1.7). The competency will work with program teams throughout the entire ISP development process assisting with initial interoperability requirements interpretation, access to related systems’ architecture data, mission architecture development and analysis, specification development, and related document review/assessment. Preparing offices are also encouraged to contact ASN(RD&A) CHSENG for guidance in developing and reviewing the document, and the OASD(NII) Architectures and Interoperability Directorate (OASD(NII/A&I)) for further information on the formal DoD/Joint-level review process. Contact the OSD ISP Process Coordination Team at (703) 607-0246. Some of the following is extracted from the Defense Acquisition Guidebook, Chapter 7.3.6. Please refer to that document for more details concerning ISP preparation.

- Process. The ISP preparing office (the program office) should convene a working-level Integrated Product Team (WIPT), composed of the appropriate subject matter experts who are familiar with the system being

acquired, the intended use of the system, and to the extent possible, the operational and system architectures within which the system being acquired will function. It is important that the WIPT include representatives of those programs with which the new system will interface, as their perspectives can preclude potentially serious misrepresentations in or omissions from the ISP. In accordance with NAVAIR Standard Work Package SWP4117-001, the resulting draft ISP must be coordinated through the NAVAIR Air Systems Interoperability office (AIR-4.1.1.7) for a NAVAIR interoperability review. For ACAT I/IA and II programs, after AIR-4.1.1.7 reviews the ISP draft it is reviewed at DON by ASN(RD&A) CHSENG, DON CIO, NETWARCOM, OPNAV N6F2, SPAWARSCOM, and MARCORSSCOM prior to its being forwarded by ASN(RD&A) CHSENG to OASD(NII) for DoD/Joint review and/or the J-6 supportability certification. *Note: ASN(RD&A) CHSENG, in cooperation with the FORCENet Coordination Council's Integration and Interoperability Working Group (IIWG), is currently developing policy for the Naval headquarters-managed review process.* The comments generated as a result of these reviews are forwarded to the PM for adjudication and issue resolution and incorporation of the appropriate revisions into the ISP. A copy of the final, PM-signed document is then submitted electronically to OASD(NII/A&I) via the Joint C4I Program Assessment Tool – Empowered (JCPAT-E). See Chapter VII, Part C of this Guide, under “J-6 Assessment Tools,” for more information on JCPAT-E.

- Timeline.** The initial draft ISP is developed concurrently with the CDD. Both documents are reviewed prior to MS B, and the initial J-6 interoperability requirements and supportability certifications are obtained based on the reviews. The figure below, taken from CJCSI 6212.01D, summarizes the requirements and acquisition interface, and shows the general timetable for document submission and subsequent re-validation/re-certification.

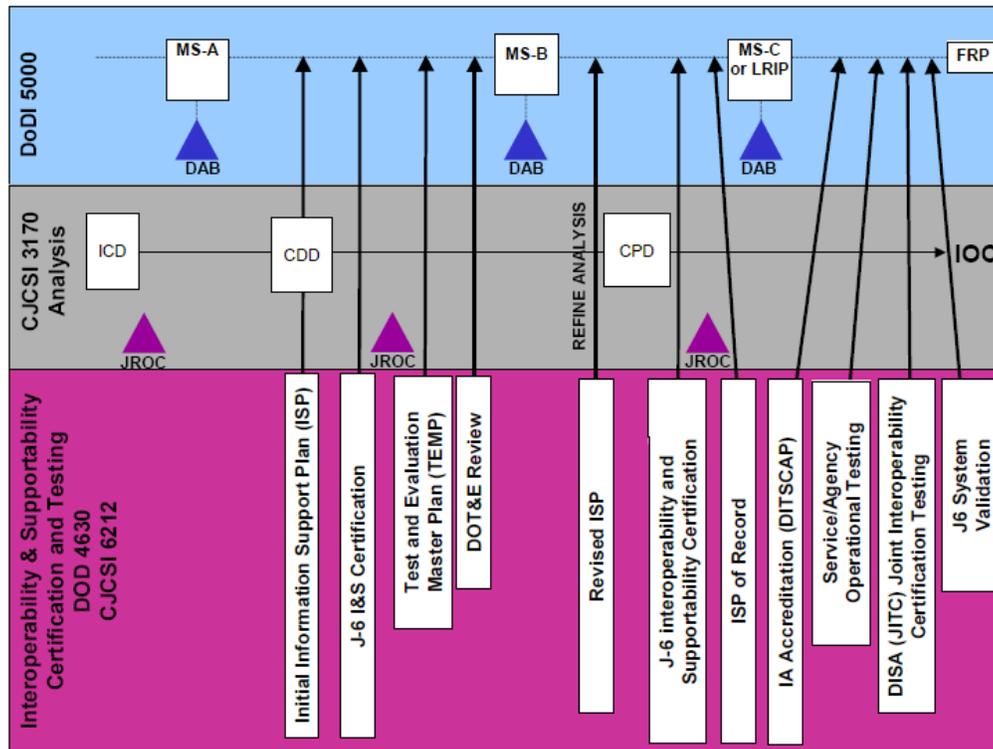


Figure A-1, J-6 Interoperability and Supportability Certification, Testing, and Validation Process for ACAT Programs (from CJCSI 6212.01D).

In general, the process of developing an ISP should start at least 1 year prior to an upcoming milestone. This will permit careful consideration of the infrastructure support requirements levied by and on the program in question, and will allow sufficient time for a thorough (and iterative, if necessary) document review process to take place. The notional timeline in the table below is offered as a guideline. Additional time may be necessary for very large or complex programs.

**Table 1. Notional ISP Development Timeline**

| Activity   | Timeline  |
|--|---|
| Start initial plan preparation   | Minimum of 1 year prior to the program’s next major milestone |
| NAVAIR ISP review  | Approximately 21 days   |
| Navy internal review   | Approximately 30 days   |
| Submission of initial draft (to OASD/NII)                                    | At least 6 months prior to the milestone                      |
| Review of initial draft  | Approximately 30 days   |
| Comment roll-up and provision to program                                     | Approximately 2 weeks   |
| Program Office comment response and submission of the final draft for review | Approximately 30 days   |
| Review final draft   | 3 weeks   |

- Updates/Revisions: Components shall keep the ISP current throughout the program’s acquisition process. The ISP shall be formally reviewed at each milestone, at each block in an evolutionary acquisition, at decision reviews, as appropriate, and whenever the concept of operations or IT, including NSS, support requirements change. The ISP must be updated to accommodate any program changes incorporated in the CPD, and if the Net-Ready KPP threshold or C4ISR information support requirements for testing are updated, the TEMP also must be reviewed for possible revision. Close coordination with affected external organizations is essential!
- “Streamlined” ISP Process. With the promulgation of the “Information Support Plan (ISP) Acquisition Streamlining Pilot Program” memorandum, 26 Aug 05, OASD(NII) introduced a new model for ISP development and review, with two major changes to the existing process:
  - The new process shortens the review cycle for each ISP submission by eliminating the flag-level review stage. Instead, each ISP submission is subjected to a single 30-day review period.
  - An additional (“Revised”) ISP is required to be submitted prior to the Critical Design Review (CDR). The PM should coordinate responses to comments received with each reviewer during the comment adjudication period for each review. A completed comment resolution matrix must be provided to JCPAT-E prior to the next ISP submission. The final, PM-signed and PEO/SYSCOM/DRPM-approved “ISP of Record” is submitted prior to Milestone C. Figure A-1 (above) reflects this new ISP process.

8.23 ISP Contents. The Defense Acquisition Guidebook, Chapter 7.3.6, provides a thorough description of the ISP’s contents. Programs are well-advised to follow its guidance when developing their ISPs.

Some key things to note (also see Lessons Learned):

- Information Exchange Requirements (IERs)
  - A single IER represents a one-way transfer of an information element (aggregated to top-level)—if a needline between two nodes on an Operational Node Connectivity Description (OV-2) diagram represents a two-way communication requirement, it would be entered into the IER matrix (OV-3) as (a minimum of) two separate information exchange requirements. The needline can appear as a single line between nodes with arrowheads at each end to represent bi-directional information flows. All nodes referenced in an IER Matrix must be shown in the OV-2 diagram.
  - Note that System Data Exchange Requirements (DERs) captured in the SV-6 extend the OV-3 Operational IERs—DERs (the machine-to-machine subset of these exchanges) flesh out the connectivity relationships between functional nodes with specific platform and systems data exchange attributes. Also, non-data exchanges (such as analog voice communications) do not appear in the SV-6.
- Analysis. In Section 2 of the ISP, identify the requirements placed on C4ISR information systems external to the system being acquired. This includes any facility, platform, communications system/network, or database that provides information to, or receives information from the system being acquired. The primary purpose of this section is to identify all of the players and the requirements your system places on them, and analyze whether the needed support will be available at IOC. This analysis may identify requirements that must be addressed through an update of the CDD/CPD for either the system being acquired or another information consumer/producer system, or through development of a new Initial Capabilities Document.

- Relationship to the TEMP
  - The system description, including interfaces with existing or planned systems that are required for mission accomplishment, and interoperability with existing and/or planned systems of other DoD Components or allies, is summarized in Section 2 of the ISP. This is presented in Part 1.b of the TEMP.
  - C4I support required for the system’s developmental and operational test and evaluation is also discussed in Section 2 of the ISP. This is translated into the TEMP’s Future Test and Evaluation sections (both Developmental and Operational) as descriptions of how interoperability with other weapon and support systems will be tested.
- Potential Issues. Section 3 contains an honest appraisal of the program’s risk relative to shortfalls in required C4I support capabilities, manpower, training, or doctrine. Specify the impact of failure to resolve the shortfalls in terms of inability to achieve threshold performance. If the system is relying on technology not currently available, this should be stated. If the system is relying on other systems under development, this should be stated. If the system is dependent on milestones of other programs, this should be addressed here. The solution to an identified shortfall may lie outside the control of the program office. Provide a recommendation identifying the organization with the responsibility and authority to address the shortfall.
- C4ISR Architectures. DoDI 4630.8 requires that the Systems Data Exchange Matrix (SV-6) be included in the ISP. It also states that “additional architecture products used in the ISP analysis will be provided in a separate appendix and referenced in the main body of the ISP.” CJCSI 6212.01D lists the DoD Architecture Framework (DoDAF) products *required* for ISPs. However, other products (such as OV-3, SV-1) may need to be developed to provide the necessary foundation for the ISP analysis. The DoDAF is the DoD-wide reference for architecture construction, and it should be consulted by the WIPT to ensure that the architecture products conform to the architecture data standards.
- Tailored ISP (TISP). CJCSI 6212.01D, Enclosure C, Appendix B describes the Tailored ISP process. Program managers for ACAT II and below programs not designated OSD Special Interest by ASD(NII)/DOD CIO may request approval from Joint Staff/J-61 to tailor the content of their ISP. The Component will make the final decision of the details of the tailored plan subject to certain minimums and any special needs identified by the J-6 for the Interoperability and Supportability Certification process. Programs must request J-6 approval—via OPNAV N6F22—before submitting a Tailored ISP.

8.24 Who Reviews ISPs. Although DoDI 4630.8 specifically states that “The DoD Components shall manage the review of all ISPs within the Component organization,” it also directs the ASD(NII)/DoD CIO to “lead a DoD-wide review of: ISPs for all ACAT I (ID and IC) and IA (IAM and IAC) acquisition programs; and ISPs for other acquisition programs in which ASD(NII)/DoD CIO has indicated a special interest.” This means that ACAT II and below ISPs need not go through DoD-wide review unless they are designated “ASD(NII) special interest.” However, the instruction also requires (as does CJCSI 6212.01D) that all ISPs—regardless of ACAT—be entered into the ASD(NII) ISP tool. (This is the venue for receiving the J-6 interoperability and supportability certification notifications.) See Chapter VII, Part C of this Guide, under “J-6 Assessment Tools,” for more information on the ASD(NII) ISP tool. In accordance with NAVAIR Standard Work Package SWP4117-001, programs submit draft ISPs to the NAVAIR Air Systems Interoperability office (AIR-4.1.1.7) for review and comment prior to signature by the PM. Additionally, programs shall allow AIR-4.1.1.7 access to all architecture data developed during the ISP process.

8.25 Approval. After resolution of any outstanding issues and incorporation of the accepted changes, ISPs are approved by the PEO/SYSCOM/DRPM.

#### 8.26 Lessons Learned

- The basis of a successful Information Support Plan is a thorough understanding of the underlying CONOPs for the system being described, especially the information management aspects. In order to construct architecture products that represent the C4ISR requirements of the system completely, the required operational capabilities and projected operational environment for the system must be clearly spelled out. Any questions involving potential connectivity requirements must be resolved before the ISP is finalized.

- Communities of Interest (COI) are the key to determining what data management strategy facets must be implemented by the program and what will be accommodated externally. Members of the COI(s) will collaborate and decide on key data elements, their authoritative sources, metadata tagging (both content and process (when/how)), and what net-centric enterprise services will be utilized and/or provided. See "Resources," below, for links to COI information.
- Currently, there are no *universal* (i.e., joint) architecture pick-lists from which to select functional node nomenclatures, activities, or information elements. For Naval programs, the Naval Architecture Elements Reference Guide includes the Common Systems Function List (CSFL), which must be used to identify applicable system functions in a Systems Functionality Description (SV-4). Additional architecture element references have been developed, to include the Common Operational Activities List (COAL), Common Information Element List (CIEL), Common Operational Node List (CONL), Common System Node List (CSNL), and Common System List (CSL). Other element descriptions are currently being developed under ASN(RD&A) CHSENG tasking. These lists can be accessed via the ASN(RD&A) CHSENG Naval Collaborative Engineering Environment (NCEE) at <https://ncee.navy.mil>, or directly at <https://stalwart.spawar.navy.mil/naerg>. *Note: ASN(RD&A) CHSENG, as a member of the DON Enterprise Architecture Coordination Board (EACB), is finalizing a policy memo and associated Configuration Management procedures. When promulgated, these will implement the DON policy for use of the Naval Architecture Elements Reference Guide.*

#### 8.27 Resources

- ASN(RD&A) CHSENG NCEE, at <https://ncee.navy.mil>
- Defense Acquisition Guidebook, available at <http://akss.dau.mil/dag/>
- DoD Architecture Framework, at <http://www.defenselink.mil/cio-nii/docs/>
- DoD CIO COI Resources, at <http://www.defenselink.mil/cio-nii/coi/>
- DoD COI Directory, at <https://metadata.dod.mil/mdr/viewByCOIs.htm>
- DoD COI Toolkit, at <https://www.us.army.mil/suite/page/479547>

8.28 POC: John Funk, Air Systems Interoperability, AIR-4.1.1.7, (301) 995-4261

## CHAPTER VIII: PROGRAM AUTHORIZATION PROCESS

### PART D: TEST AND EVALUATION MASTER PLAN (TEMP)

8.29 Overview. The TEMP defines overall structure and objectives of the test and evaluation program, integrating necessary developmental, operational, and live fire test and evaluation activities, resources, schedule, management strategy, and evaluation criteria in a framework sufficient for generating other detailed test plans, schedules, and documents. TEMPs are required for all Navy ACAT programs. The TEMP is reviewed for currency and updated, if required, at each milestone, when the Acquisition Program Baseline is breached, or when the program changes significantly. A current approved TEMP is required for milestone decision reviews, for conducting testing, and for certification of readiness for operational test phases. The NAVAIR process for TEMP drafting and approval is contained in the draft NAVAIRINST 3960.2D.

#### 8.30 Reference Documents:

DoD Directive 5000.1  
 DoD Instruction 5000.2  
 DoD Interim Defense Acquisition Guidebook  
 SECNAVINST 5000.2  
 NAVAIRINST 3960.2

8.31 Process. A completed TEMP is the culmination of a comprehensive coordinated effort between the PMA; the developmental test (both contractor and government), live fire test and evaluation, and operational test communities; N912; the program sponsor; and in the case of oversight programs, the Office of the Secretary of Defense (OSD). The TEMP process steps and associated notional timeframe are outline in the following table.

| PROCESS STEP   | AVG TIME (not including issue resolution delays)   |
|--|--|
| Obtain Test and Evaluation Identification Number (TEIN)                                    | 1 to 2 weeks   |
| TEMP Drafting and Review<br>(May require multiple Test Plan Working Group (TPWG) meetings) | Normally 3 months. Can be up to 6 months   |
| AIR-5.1.1 TEMP Executive Strategy Review (ESR)   | 1 week   |
| O-6 Review   | 1 month  |
| Post O-6 Review T&E WIPT   | 2 weeks  |
| PMA Approval and Submission  | 1 week   |
| Approval (ACAT Dependent)  | ACAT I - 5 months<br>ACAT II - 4 months<br>ACAT III - 3 months<br>ACAT IVT - 2 months<br>ACAT IVM - 1 month<br>Software Qualification T&E (SQT&E) - 2 months |

8.32 TEIN. Test and Evaluation Identification Numbers (TEINs) are used as a tracking number, among other purposes, for acquisition test programs. In general, a signed requirements document (e.g. ICD, CDD, CPD) is required before a TEIN is assigned. The Program Office APMT&E requests a TEIN via N78 and N912 assigns a TEIN that is used as the TEMP number.

8.33 Development. Key document inputs to the TEMP are: Initial Capabilities Document (ICD), Mission Needs Statement (MNS) (the MNS is a legacy document replaced by the ICD), the Analysis of Alternatives (AoA), Capabilities Development Document (CDD), Capability Production Document (CPD), Operational Requirements Document (ORD) (the ORD is a legacy document replaced by the ICD, CDD, and CPD), Software Statement of Functionality (SOF) (for software TEMPs), and the Capstone System Threat Assessment Report (CSTAR). The TEMP format found in the DoD Defense Acquisition Guidebook, is required per the SECNAV 5000.2. Deviation from the format must be approved by N0912. Use of T&E WIPTs is strongly recommended because they bring together all parties who have a stake in the TEMP to plan test strategy, determine scope of testing and resources required, and document the agreements in the TEMP. **Start early because TEMP development may require up to 6 months** (see above table).

8.34 AIR 5.1.1 ESR. After the TEMP is mature and before it is distributed for O-6 Review, an ESR should be conducted. The ESR is a competency “graybeard” review to evaluate the draft TEMP for technical correctness, and adherence to DOD, OPNAV, and NAVAIR instructions and guidance.

8.35 O-6 Review. When the TEMP is reasonably mature, it is distributed at the O-6 level in parallel to all organizations that sign the TEMP. One month is the recommended timeframe for each organization to staff the draft TEMP for comments.

8.36 Approval. TEMP routing and typical approval durations are ACAT dependent. **The approval process can be up to 6 months for ACAT IC/D programs, so prior planning is needed** (see above table).

8.37 Lessons Learned. Early involvement of the Operational Test Agency and DOT&E is crucial. Ensure sufficient time is allocated for TEMP review, re-write, and approval. T&E WIPTs are critical to timely TEMP development/updates, and to resolving issues and ensuring operational requirements, thresholds, resources, certification requirements and overall developmental, operational and integrated test plans are clear, accurate and consistent with overall strategy and other documentation.

8.38 POC: Joseph Wascavage, AIR-5.1.1, (301) 757-6514

## CHAPTER VIII: PROGRAM AUTHORIZATION PROCESS

### PART E: PROGRAM TAILORING/STREAMLINING

#### 8.39 Source Documents:

DoDD 5000.1  
SECNAVINST 5000.2D

#### 8.40 Purpose

8.40.A DoDD 5000.1, para 4.3.1: “There is no *one* best way to structure an acquisition program to accomplish the objective of the Defense Acquisition System. MDAs and PMs shall tailor program strategies and oversight, including documentation of program information, acquisition phases, the timing and scope of decision reviews, and decision levels, to fit the particular conditions of that program, consistent with applicable laws and regulations and the time-sensitivity of the capability need.”

8.40.B As noted above, responsibility for program tailoring/streamlining lies with a program's PM and Milestone Decision Authority (MDA). As long as tailoring is consistent with any applicable statutory requirements, the MDA has full authority to reduce, consolidate, or eliminate any procedures or documents that do not add value to executing the program. A prime example of tailored procedures would be the combination of two or more milestone reviews, or the elimination of Milestone B and/or the Systems Development and Demonstration Phase for a program where there is no Navy development effort.

8.41 Discussion. While the final decision on tailoring/streamlining rests with the MDA, the key to tailoring in regards to a particular program lies with the PM or IPT lead, who is obviously best situated to identify and recommend what should or shouldn't be tailored in regards to his or her program. DoDI 5000.2 establishes the key issues that must be formally addressed at a milestone review. Milestone documentation serves as a vehicle to address these key issues. If a particular document or part of a document does not show how a PM is addressing a key issue, then it is likely that preparation of that document does not help in program execution but simply utilizes program resources that could best be applied elsewhere. The same would apply to non-statutory procedures or reviews. In such situations, the PM needs to bring tailoring proposals to the attention of the MDA for a final decision.

8.42 Responsibilities. The exact mechanics of how a PM submits a proposed tailoring approach will vary from MDA to MDA, but the key is to get the MDA's concurrence as far in advance of the next milestone or decision review as possible. That way there will be little chance for any last minute surprises just before the program is ready to go to the milestone or decision review.

#### 8.43 Lessons Learned

8.43.A As a general rule, the lower a program's ACAT designation, the more likely it will be a candidate for tailoring/streamlining.

8.43.B Requirements/capabilities documents are the responsibility of OPNAV, no matter who actually writes them. PMs should work with their OPNAV Sponsor as to how to tailor such documents.

8.43.C For less than ACAT I programs, there are relatively few acquisition documents required by statute. Prime examples of such documents are the Acquisition Plan (only required if certain dollar thresholds are breached – see Chapter VII, Part B of this Guide); the Environmental, Safety, and Health Evaluation; and the Operational Test and Evaluation Report (except for ACAT IVM programs). PMs should consult enclosure (3), Table E3T1 of SECNAVINST 5000.2D to ascertain which documents are required by statute.

8.43.D Tailoring for ACAT IC and II programs should be coordinated with OASN(RD&A). PMs for whose programs a PEO is the MDA should consult with their respective PEO acquisition support staff as to the mechanics

of how to present tailoring proposals to their PEO for delegated ACAT III and ACAT IV programs. For programs that have AIR-1.0 as MDA, AIR-1.0D should be consulted.

8.43.E The bounds of tailoring are limited, aside from statutory requirements, only by our own common sense as to what is needed and not needed to execute programs smartly and to ensure that our limited resources are used in the most efficient and effective manner possible.

8.44 POC: Lola Scott, AIR-1.1, (301) 757-7228

## CHAPTER IX: PROCUREMENT PROCESS

### PART A: PID PROCESS

9.1 General Discussion. The Procurement Initiation Document (PID) process is initiated with the identification of the program procurement requirement by the program manager (PM). This may be a new requirement or a modification to an existing requirement. NAVAIRINST 4200.37A describes the PID process from identification of a requirement by the PM up to the time that Contracts releases a new solicitation to industry, or a modification or order is incorporated into an existing contract. Other funding type PIDs issued through AIR-10.2 (Comptroller and Financial Management Department) to agencies external to NAVAIRHQ may include Military Interdepartmental Purchase Requests (MIPRs), Project Orders (POs), Requests for Contractual Procurement (RCPs), etc. NAVAIRINST 4200.37A focuses on increased flexibility in process procedures to allow for tailoring to meet procurement milestones. It reinforces the leadership role of the PM and empowers the Integrated Program Team (IPT) members to make decisions for their competency. The process goals include:

9.1.A Ensuring up-front planning and requirements definition, and getting consensus from the IPT on specific services to be procured, as well as establishing the contract line item structure **before** the IPT drafts a PID.

9.1.B Building a strong, dedicated procurement team led by the PM or designated representative and committed to defining and preparing a quality PID.

### 9.2 What to Concentrate On

#### 9.2.A Planning

9.2.A.i The PM issues a requirements letter to the IPT defining the basic (draft) program procurement requirements and scheduling a procurement planning conference for more in-depth discussion. Allow 18-24 months from requirements definition to contract award/funds obligation. NAVAIR's objective is to have funds obligated as soon as possible following receipt of funds, but not later than 1 April (before mid-year reviews) of the fiscal year of funding availability. During briefings on the process, questions may come up such as "Why do you start two years in advance for an APN-5 OSIP (Operational Safety Improvement Program) program?" You don't have to begin immediately, but the IPT must plan for what needs to be accomplished and when to start that activity in order to achieve timely contract award/funds obligation.

9.2.A.ii Things to consider on an OSIP program include such items as: (1) Does a Basic Ordering Agreement (BOA) exist to allow placement of an order for the modification kit? If one exists, will it still be active the fiscal year in which funding becomes available? If the answer is no, you must start the procurement effort immediately. (2) Will government furnished equipment (GFE) be required as part of the installation kit? Are there contracts available to purchase the items? Is coordination with another PMA, Service, or Agency required? Even if NAVICP Philadelphia procures the item for you, they will need advance-planning notification. (3) Have International Program customers been notified? (4) Should options be set up on future contracts to cover the entire OSIP program? (5) When is the Engineering Change Proposal (ECP) required? (6) When should the ECP be taken before the Change Control Board (CCB)? (7) Should PMA205 be notified for potential trainer modifications? These are some of the questions that should be addressed at the Program Planning Conference (PPC).

9.2.A.iii For production aircraft programs, conduct of a Master Government Furnished Equipment List conference (MGFEL) (which identifies the configuration, quantity and timing of the items the Government must supply to the primes), establishment of the contract line item structure, and development of an appropriate acquisition strategy are important steps. For R&D programs, outlining what is needed to complete a successful milestone review, and determining where the product (hardware, analyses, reports, etc.) should come from, will assist in identifying what items in the contract line item structure and what data needs to be procured.

9.2.B Requirements Identification. Program offices budget three years in advance using the Planning, Programming, Budgeting, and Execution (PPBE) process. Even though Congress may change the final outcome, there is no reason not to initiate the PID process by identifying to the IPT on what requirements the budget input is

based. Ensure the entire IPT knows what the program baseline is, and what constraints have been placed on the procurement (e.g., number of deliverables, timing for completion of tests to support milestone reviews, competition, small business, etc.). Do this in written form, so as the budget process continues and changes occur or IPT members change, there will be an audit trail for all participants. This written record is called the Procurement Planning Agreement (PPA), and documents the procurement requirement, the IPT, and key procurement milestones, as well as actions/issues that must be addressed and resolved prior to contract award.

9.2.C Scheduling. Set dates for completion of tasks and continuous monitoring of the achievement of those tasks. The final product cannot be successful unless the IPT leaders are constantly involved in making decisions, communicating changes, etc, to make it happen. REMEMBER. FOR ALL MAJOR PROCUREMENTS, THE PRODUCT AIR-2.0 RELEASES TO INDUSTRY AS A SOLICITATION MUST BE A TEAM EFFORT IPT LEADERS CANNOT JUST ASSIGN THE PID EFFORT TO ONE PERSON AND SAY "MAKE IT HAPPEN". The success of the PID process is dependent on all competency members being involved, doing their portion, and commenting on the contribution of others so the final product is integrated and results in a quality PID with which Contracts can work to transform into a solicitation that is responsive to the procurement requirement.

### 9.3 Lessons Learned

9.3.A Since the PMAs have the requirement to procure something (small or large), the responsibility lies with them to generate the PID and associated documentation (i.e., J&A, AP, Spec, etc.). Some PMAs may assume it is the role of Contracts to prepare the PID since Contracts issues the solicitation. This is not true, the PMA has the responsibility to generate the documentation.

9.3.B Designate one person in the PMA to coordinate, control and monitor the PID.

9.3.C Include FMS personnel when holding PPCs for FMS buys.

### 9.4 Reference Material

9.4.A NAVAL AIR Systems Command PID Guide. This Guide describes in detail how to prepare a PID, which ultimately becomes a solicitation, contract modification, or change order. It contains examples of PID Sections B through H and J to provide preparation assistance, briefly describes the DoD acquisition process and how the procurement process is integrated with the acquisition milestones, discusses the role of the IPT members, the purpose of the PPC, and the importance of the Data Requirements Review Board (DRRB). The Guide is available at <https://home.navair.navy.mil/pmcwebtool>.

9.4.B NAVAIRINST 4200.37A, subj: The Procurement Initiation Document Process, dated 5 July 2000, delineates the PID process roles and responsibilities. It describes each player's part in the process and the thresholds and reasons for holding PPCs. An example of a PPA is provided as an attachment to this instruction. This instruction is also available at <https://home.navair.navy.mil/pmcwebtool>.

## **9.6 TYPES OF PROCUREMENT INITIATION DOCUMENTS**

### **Document**

### **Purpose**

Procurement Initiation Document (PID)

Provides Contracts information necessary for appropriate procurement actions. NAVAIRINST 4200.37A delineates the PID process and responsibilities. The NAVAIR PID Guide details PID preparation.

### **FUNDING DOCUMENT TYPES OF PIDS**

Request for Contractual Procurement (RCP)

Requests contractual procurement from any Navy activity.

Project Order (PO)/Economy Act Order/Work Request

Limited to funding requirements for work or services to be performed by Navy recipient. Contractual effort cannot exceed 49% of document's reimbursable total.

Order for Work and Services/Direct Citation

Activity determines portion accepted direct cite. Contractual effort cannot exceed 49% of amount accepted on a reimbursable basis but is 100% of amount accepted on direct cite basis.

Allotments

Used to fund procurements when requirements are determined by receiving activity.

Military Interdepartmental Purchase Request (MIPR)

Request work, supplies, or services from other DOD activities (e.g., Army). Also provides funds for ordering items on NAVAIR contracts administered by Defense Plant Representative Officers (DPROs).

Interdepartmental Purchase Request (IPR)

Used to procure services, supplies, etc., from activities outside DOD. Requires approval from Legal (AIR-11.0) and Contracts (AIR-2.0).

Military Standard Requisitioning and Issue Procedure (MILSTRIP)

Used to requisition supplies or repair parts - from services' stock.

### **THE FOLLOWING ARE NOT CONSIDERED PIDS**

Data Sheet

PID/PR

Letter of Intent

To NWCF activities for procurement purposes when no other document will suffice.

## CHAPTER IX: PROCUREMENT PROCESS

### PART B: PROCUREMENT PLANNING CONFERENCE (PPC)



#### 9.7 Notes

- 1) Procurement Planning Conferences (PPCs) are used to conduct advanced planning for procurements and Engineering Change Proposals (ECPs).
- 2) Program Managers (PMs) should allow two to three weeks from PPC announcement to Procurement Planning Agreement (PPA) signature. Multiple meetings are often required.
- 3) Processing time for PPC events may vary, depending upon the nature/complexity of the required procurement.

9.8 Purpose. Acquisition of Naval Aviation systems, equipment, software, and contractor support services by NAVAIR is accomplished through the generation of a Procurement Initiation Document (PID) and subsequent award of a contract. PIDs may also be the result of an upgrade or modification to a system as reflected in approved ECPs. Key to the development and timely award of quality contractual vehicles is the proper use of advanced procurement/obligation planning, accomplished through the conducting of PPCs. The PPC is a formal procurement team meeting (or series of meetings) arranged and conducted by the PM in advance of procurement initiation to: (1) identify and/or verify procurement team members, (2) establish a common procurement requirements baseline, (3) establish mutual agreement on the appropriate procurement strategy, (4) acquaint IPT members with issues or technical tasks that must be resolved and/or accomplished prior to release of the solicitation, and (5) establish a schedule for the preparation, review, and processing of procurement documentation from the results of the PPC to contract award. The results of the PPC are documented in the form of a procurement planning agreement (PPA), which is approved by the PPC principals. The approved PPA represents a commitment by all parties, establishes accountability for all required actions, and serves as the PM's management plan to monitor the progress of the procurement action. The key PPC events also serve as milestones to be used by the PEO, PM, and the program team members to track the progress of the procurement and ECP actions that are equal to or greater than \$1 million in value.

9.9 Source Documents: NAVAIRINST 4200.37A, and the NAVAIR PID Guide

9.10 Critical Prior Events. The PPC is the first event in the generation of a PID. The PPC should be held as soon as the procurement requirement has been identified. Three related activities precede the PPC: (1) PM identification of the procurement requirement (e.g., NAVCOMPT budget, MGFEL conference, POM, ICP, etc.), (2) initiation or update of the Acquisition Plan (AP), and (3) initiation of Clinger-Cohen compliance activity. These efforts should be completed prior to PID initiation. Market Research in accordance with FAR Part 10 should be completed prior to initiation or update of the Acquisition Plan.

9.11 PPC Attendees. The PPC is called and scheduled by the cognizant PM. Attendance may vary from PPC to PPC depending on the procurement, but generally includes cognizant NAVAIR offices directly involved in preparation, review, and approval of the PID. For new procurements, the PPC will normally include: (1) the PM (PPC Chairperson or designated representative), (2) the PID originator, (3) the assigned Assistant Program Manager for Logistics (APML) and Industrial Operations AIR-6.0, (4) the assigned Assistant Program Manager for Systems Engineering (APMSE Class Desk), AIR-4.0, (5) the assigned Assistant Program Manager, Test & Evaluation (APMT&E), AIR-5.0, (6) the Primary Contracting Officer (PCO) from AIR-2.0, (7) the assigned Cost Team Leader, AIR-4.2, (8) a representative from the Comptroller's office, AIR-10.0, (9) a representative from the Small and Disadvantaged Business Utilization Office, AIR-09D, (10) a representative from Business and Financial Management, AIR-7.8, (11) a representative from Security, AIR-7.4, and (12) a representative from Office of

Counsel, AIR-11.0. If formal source selection procedures are required for a competitive procurement, a representative from AIR-4.10C should be included as a member of the PPC. Additional members may be invited to attend at the discretion of the PM. For smaller procurements, full attendance by all of the above-cited representatives may not be required.

9.12 The Procurement Planning Agreement (PPA). The results of a PPC are recorded in a PPA. The PPA represents an informal "contract" among the PPC principals. It identifies events and projected dates required to affect timely contract award, and records action assignments as a result of discussions held to establish an appropriate procurement strategy. The resultant PPA contains the following procurement information: (1) PID number and procurement item nomenclature, (2) date of PPC meeting(s), (3) list of PPC(s) attendees, (4) topics discussed and action item(s) assigned (with action code and due date) at the PPC(s), and (5) dates for submission of the PID to AIR-2.0, solicitation release date, and target contract award date. Upon approval, copies of the PPA are provided to the PPC principals.

9.13 Responsibilities. The PM is responsible for calling the PPC, preparing and coordinating the PPA, distributing copies to all participants (within 5 workdays after the PPC), and holding the procurement team accountable for schedule and products. The following page provides the PID numbering scheme and attendant PPC requirements. PPC attendees are expected to be trained, knowledgeable of their functional policies/procedures for the competencies they represent, and empowered to make commitments on behalf of the functional competency manager. This will reduce and/or virtually eliminate the need for subsequent staffing of the PID to higher management levels within the competency.

#### 9.14 Lessons-Learned

9.14.A Too often, PPCs are held for the primary purpose of establishing schedule agreements. While this may be appropriate for routine/follow-on procurements, it is inadequate for new procurements or procurements facing unique issues. NAVAIRINST 4200.37A provides a recommended checklist of discussion topics, which should be reviewed and discussed to surface issues that could impact the PID process and affect timely contract award/fiscal obligation.

9.14.B While PPC-type reviews should precede each procurement, the review and the required participants should be tailored for each requirement. PPCs for routine follow-on procurements will differ from those for new procurements. Some procurement actions may not necessitate the need for a formal PPC (e.g., admin changes, changes to CDRL, funding documents, etc). However, this should be verified by the PM (or designated IPT representative) with advice of the designated PCO, prior to issuance of the PID number and initiation of the PID. Additionally, the PM should recommend a PPC if programmatic changes are encountered that might impact the procurement strategy or schedule.

9.14.C PPC attendees should be knowledgeable of the practices and policies of their competency. The PM has the right to expect IPT members to be skilled in their respective areas and empowered to contribute to a quality product. Additionally, the PM must be able to expect schedule adherence by the IPT members to a plan of action and milestones mutually agreed to by PPC participants.

9.15 POC: Elveta Johnson, AD-1.1, (301) 342-3410

## **9.16 PROCUREMENT CATEGORY CODING DETAIL**

### **CATEGORY “P1” N00019-XX-P1-XXXXX (MAJOR)**

- New Program/equipment starts (RDT&E, production, logistics)
- Follow-on hardware procurements (examples follow)
  - Aircraft/Government Furnished Equipment (GFE)/Missile & Components/Support Equipment (SE)/Air Traffic Control (ATC)/Imaging Systems/Launch and Recovery Systems
  - Independent (stand-alone) FMS Solicitations for above
- PPC Required

### **CATEGORY “P2” N00019-XX-P2-XXXXX (BOAs)**

- PIDs to establish Basic Ordering Agreement (BOAs)
- PIDs to place BOA orders (with changes required to basic BOA)
- PIDs to place BOA orders (with no change required to basic BOA)
- PIDs to modify or amend BOAs
- PPC required for BOAs and BOA Orders

### **CATEGORY “P3” N0019-XX-P3-XXXX (OPTIONS)**

- Exercising an established option (all types where changed requirements (e.g., scope of effort, schedule) must be addressed)
- Exercising an established option (all types) with no changes
- PPC is not required except when exercising the option is not routine

### **CATEGORY “P4” N00019-XX-P4-XXXX (PROVISIONED/MISCELLANEOUS/MINOR)**

- General one-time/miscellaneous/provisioned/line item type requirements
  - One-time microcircuit obsolescence buy
  - Production program spin-off or stand-alone RDT&E contracts (engineering studies/investigations, non-recurring engineering, etc)
  - Production line support (i.e., test equipment/Belmont/lay-away)
  - MANTECH, Industrial Modernization Incentives Program (IMIP), Foreign Comparative Test (FCT)
  - Spares procurements (as add-on to production buy)
  - Repair of Repairables (ROR) contracts
  - Establish new provisioned line items (for future consideration)
- PPC Optional depending on specific PID

### **CATEGORY “P5” N00019-XX-P5-XXXXX (CONTRACTOR CONSULTING SERVICES)**

- PIDs to establish basic consulting services (CS) type contract
- PIDs to place orders against CS contracts
- PPC required for new contracts. PPC not required for individual Delivery Orders

### **CATEGORY “P6” N00019-XX-P6-XXXXX (SBIR)**

- Small Business Innovation Research (SBIR) Program – Phase I
- Small Business Innovation Research Program – Phase II
- PPC Optional for Phase II SBIR requests

**CATEGORY "P7" N00019-XX-P7-XXXXX (CONTRACT/FUNDING/OTHER)**

- Largest category of PIDs for admin/funding, etc., type requirements
- Incremental funding/late funds/line accounting change
- CDRL changes/address changes/code changes/part number changes, etc.
- Change established contract quantities or delivery schedule
- Solicitations providing funds for change orders for Engineering Change Proposal (ECPs) (Change Control Board)
- Specification/SOW changes
- Adding new line items other than provisioned line items or spares
- Revised DD 254 contract security classification requirements

## CHAPTER IX: PROCUREMENT PROCESS

### PART C: DATA MANAGEMENT

9.17 Purpose. Data Management is the process of applying policies, systems, and procedures for the identification and control of data requirements for the distribution or communication of the data to point of use; and for analysis of data use. To ensure only essential data is acquired, the data requirements shall be clear, concise, justified, and in accordance with the Statement of Work (SOW). Any unnecessary data shall not be procured.

9.18 Source Documentation:

Defense Federal Acquisition Regulation Supplement (DFARS)  
Department of Defense Instruction (DODI) 5000.2, Operation of the  
Defense Acquisition System  
DoD 5010.12-M, Procedures for the Acquisition and Management of  
Technical Data Acquisition Streamlining and Standardization Information System (ASSIST):  
<http://assist.daps.dla.mil/online/start/>  
SECNAVINST 5000.2D, Implementation and Operation of the Defense Acquisition System and the Joint  
Capabilities Integration and Development System  
MIL-STD-963B, Department of Defense Standard Practice Data Item Descriptions (DIDs)  
NAVAIRINST 4200.21D, Data Requirements Review Board (DRRB)

9.19 Responsibilities

9.19.A Program Managers are responsible for ensuring their data requirements comply with the policy and procedures set forth in DFARS, DODI 5000.2, DoD 5010.12-M, and NAVAIRINST 4200.21.

9.19.B AIR-1.1 is responsible for providing policy and guidance governing the acquisition and management of data, including the processing of all Repetitive Data Item Descriptions (DIDs) and approving all One-Time DIDs.

9.19.C AIR-1.1 will provide advisory support and assistance to the PMAs as required to establish a formal Data Requirements Review Board (DRRB), and ensure data management policy and procedural changes are communicated to the PMAs. When requested by the Program Manager, AIR-1.1 shall provide assistance in developing standard operating procedures, IAW NAVAIRINST 4200.21D.

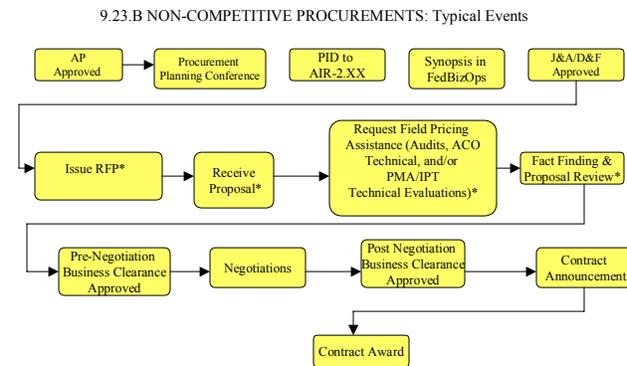
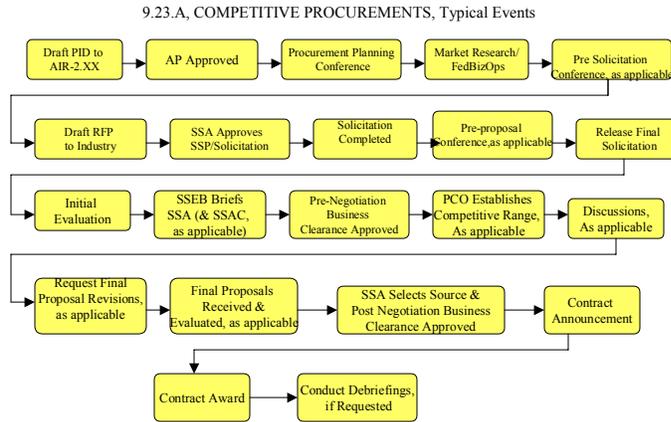
9.20 Lessons Learned. Acquisition of data and tailoring data requirements will be discussed as part of the Procurement Planning Conference (PPC) with the appropriate Integrated Program Team (IPT) members and user community involved. Sufficient time should be allowed to produce a quality Performance Based Statement of Work and the minimum data requirements to support the specific Initial Capabilities Document (ICD) or Capability Development Document. It is imperative that DoD reduce the cost of data acquisitions, such as requesting data in contractor format versus unique DoD format, and ensuring only essential and minimum data is procured. With realistic time schedules established, the rework of Procurement Initiation Documents can be reduced.

9.21 For additional information on Data Management and One-Time DIDs, please visit the PMC WebTool at <https://home.navair.navy.mil/pmwebtool>.

## CHAPTER IX: PROCUREMENT PROCESS

### PART D: PROCURING ACTIVITY TO CONTRACT AWARD

#### 9.23 Flow Process. FOR MAJOR DOLLAR VALUE CONTRACTS OF \$50M OR GREATER



\*In Alpha Acquisition, these steps are concurrent vice linear.

9.24 Purpose. AIR-2.0 is tasked to provide contracting for hardware and services to support the NAVAIR mission. As a major systems command, the contracting effort at NAVAIR is oriented toward those items that are complex and of significant value. For non competitive procurements, the Acquisition Plan (AP), if required, should be submitted to the approval authority (PEO or AIR-1.0) at least 60 days prior to submission of the J&A to ensure that the AP is approved prior to the J&A being forwarded. If events require that the J&A and AP be submitted concurrently, forward the J&A under a cover memo that explains the situation and provides the rationale for why the AP was not submitted earlier. A J&A may be submitted for approval without an approved AP, provided a waiver of the timing of the AP preparation has first been obtained from the AP approval authority.

#### 9.25 Source Documents:

Federal Acquisition Regulations (FAR)  
 DoD FAR Supplement (DFARS)  
 Navy/Marine Corps Acquisition Regulation Supplement (NMCARS)  
 Various NAVAIR instructions regarding procurement of supplies and services

9.26 Responsibility. Contracting Officers are responsible for ensuring all requirements of law, executive orders, regulations, and all other applicable procedures including clearances and approvals, have been satisfied in the best

interests of the United States. Contracting Officers are given wide latitude to exercise business judgment, and the following actions are just a few required of Contracting Officers in the performance of duties:

9.26.A Ensure sufficient funds are available for obligation;

9.26.B Ensure contractors receive fair and equitable treatment;

9.26.C Request and consider the advice of specialists in audit, law, engineering, transportation, and other fields as appropriate; and

9.26.D Document that the proposed contract is in the best interest of the Government.

9.27 Reviews and Approvals. The following is the main chain link progression for approvals and their impact on critical events:

9.27.A The Acquisition Plan (when required: with a development contract worth more than \$10M, or a production or service contract worth more than \$50M (including all options) or more than \$25M in any one fiscal year (see chapter VIII Part B)) must be approved prior to synopsis;

9.27.B The results of the synopsis should be known before J&A approval;

9.27.C The J&A (if applicable) must be approved prior to release of the request for proposal (RFP);

9.27. D Sec. 818, FY07 NDAA introduced new requirements for selecting contract type, implemented in DFARS 235 and DFARS 234:

9.27.D.1 For major defense acquisition programs as defined in 10 U.S.C. 2430, per DFARS 235.006(b)(i) and DFARS 234.004(2), the contract type for a major defense acquisition development program (i.e., ACAT I) must be selected by the milestone decision authority (MDA) at the point a program enters Milestone B. While the contract type may be either fixed price or cost type, a cost type contract may only be selected if the MDA determines, in writing: (1) the program is so complex and technically challenging that it would not be practicable to reduce program risk to a level that would permit the use of a fixed-price type contract; and (2) the complexity and technical challenge of the program is not the result of a failure to meet the requirements established in section 2366a of title 10, United States Code.

9.27.D.2 For other than major defense acquisition programs, per DFARS 235.006 (b) (ii)(A)(3)(ii), fixed-price development contracts over \$25M are reviewed and approved by USD(AT&L) for research and development for a non-major system; the development of a major system (as defined in FAR 2.101); or the development of a subsystem of a major system; or by the contracting officer for any development not covered by the foregoing. In addition, obtain USD(AT&L) approval of the Government's pre-negotiation position before negotiations begin, and approval of the negotiated agreement with the contractor before the agreement is executed, for any action that is: 1) an increase of more than \$250M in the price or ceiling price of a fixed-price type development contract, 2) a reduction in the amount of work under a fixed-price type development contract when the value of the work deleted is \$100M or more, or 3) a repricing of fixed-price type production options to a development contract which increases the price or ceiling price by more than \$250M for equivalent quantities;

9.27.E Additionally, the USD(AT&L) shall be notified, within a reasonable period of time before option expiration, of the intent not to exercise a fixed-price type production option on a development contract for a major weapon system; all notifications and requests will be forwarded to USD(AT&L) via ASN(RD&A);

9.27.F Pre-negotiation clearances will be prepared and approved prior to entering negotiations for sole source acquisitions and prior to making a competitive range determination in competitive acquisitions;

9.27.G Notification to Congress is required prior to any contract award greater than \$5.5M; and

9.27.H Post negotiation clearances will be prepared at the conclusion of negotiations for sole source acquisitions and prior to source selection in competitive acquisitions.

## 9.28 Lessons Learned

9.28.A THINK COMPETITION!!! (See Chapter XII, Part A). The time spent in the approval process for a sole source can in many cases exceed the time required to get a competitive contract in place. Check with NAVICP and AIR-3.2 for suppliers and data that could enable a competitive acquisition. If the item is clearly sole source, then the strongest possible justification should be presented from the beginning and in advance of the AP submission.

9.28.B In compliance with COMNAVAIR policy, the program/acquisition manager should form a team represented by all competencies to ensure all aspects of the contract and all requirements of the system/service being procured are identified up front. The time spent here can save rework and frustration later.

9.28.C Keep the contracting officer informed of changes in quantity or requirements. Try to structure quantity options for both the current fiscal year and future fiscal years whenever feasible.

9.28.D Use the influence of the contracting officer with the contractor to reinforce the one face to industry precept. When contractors know that they cannot run the negotiations, they will come to a settlement agreement earlier.

9.28.E For aggregate requirement type actions, changes can not only slow your program, but many others as well. Identification of requirements is probably the single most difficult and most important issue. Use of options within fiscal year buys is a very powerful tool.

9.28.F Past performance/systemic improvement is now evaluated in virtually all competitive contracts, providing an opportunity to focus on specific performance criteria deemed important in selection of a contractor.

9.28.G Actively seek out, and discuss with contracting officers, contracts that would be suitable candidates for multiyear procurement. Use of multiyear contracts provides for level pricing of requirements and can save money since it usually results in purchase of economic order quantities and reduces the contractor's risk in purchasing long lead items and committing to expensive up-front set-up costs.

9.28.H Look for areas of larger competitive or non-competitive procurements, which can be broken out for 8(a) procurement or small business competition. Look also for areas of possible subcontractor competition. These will increase our potential for meeting our assigned competition and small business goals.

9.28.I In order to streamline the acquisition process, make maximum use of a standard source selection plan, consider carefully the use of options (tying the exercise of them to development milestones where possible, and encourage contractors to use electronic submission of proposals and discuss with the contracting officer the potential use alpha acquisition where circumstances warrant.

9.29 POC: Contact the cognizant program contracting officer or , Contract Policy Management Division, AIR-2.1.1, (301) 757-6596

## **CHAPTER X: MANAGING PROGRAM MODIFICATIONS**

### 10.1 Source Document:

SECNAVINST 5000.2D, encl (2), section 2.5.5 and Table E2T2

### 10.2 Discussion

10.2.A The chart on the next page, extracted from SECNAVINST 5000.2D, summarizes the various modification scenarios and the associated actions required of the program manager, CNO/CMC sponsor, and the Milestone Decision Authority (MDA).

10.2.B Historically, modifications that, due to their cost and complexity, meet the ACAT I designation qualifications have been managed as separate ACAT I programs. Modifications that are below the ACAT I dollar thresholds will be considered part of the program being modified. Such modifications will not require a separate ACAT designation unless: 1) the program being modified is out of production or is in production but does not have an ACAT designation, and 2) the modification exceeds the dollar thresholds and test criteria for being classified as an Abbreviated Acquisition Program (see Chapter VII, Part A). If the program being modified is in production but does not have an ACAT designation, a single ACAT designation covering both the program and the modification(s) will be required. Of course, the MDA always has the option of directing that a modification be managed as a separate ACAT program even if it does not otherwise qualify as such. In addition, a modification could conceivably cause a change in the ACAT level for an ongoing program, in which case an ACAT designation change request shall be submitted for approval.

10.2.C A modification can result in revisions to the modified program's milestone information and affected documentation (e.g., Acquisition Baseline Agreement, Acquisition Strategy, Test and Evaluation Master Plan) that will need to be approved by the MDA and other required signatories.

10.3 POC: Lola Scott, AIR-1.1, (301) 757-7228

| <p style="text-align: center;"><b>Modification Initiation Process Conditions</b></p> <p style="text-align: center;">(The answers to the questions in columns 1 through 4 will determine the row that most closely relates to your ongoing program characteristics and proposed modification)</p> |                             |                                  |  |   |  |   |
|--|-----------------------------|----------------------------------|--|---|--|---|
| Pgm being modified is an active ACAT?  | Mod breaches APB threshold? | Mod requires additional funding? | Mod cost exceeds "Abbreviated Acqn Program" \$ criteria? <sup>4/5/</sup> | PM action   | CNO/CMC action <sup>6/</sup>   | Program Decision Authority or MDA action  |
| YES  | NO                          | NO                               | YES <sup>5/</sup> or NO  | Execute mod   | Approve CDD/CPD <sup>2, 5/</sup>   | None  |
| YES  | NO                          | YES                              | YES <sup>5/</sup> or NO  | Prepare funding request<br>Execute mod  | Approve CDD/CPD <sup>2, 5/</sup><br>or requirement<br>Provide funding  | None  |
| YES  | YES                         | NO                               | YES <sup>5/</sup> or NO  | Revise APB <sup>1/</sup><br>Revise TEMP <sup>2/</sup><br>Execute mod  | Approve CDD/CPD <sup>2, 5/</sup><br>or requirement<br>Endorse APB <sup>1/</sup><br>Endorse TEMP <sup>2/</sup>                    | Approve APB <sup>1/</sup><br>Approve TEMP <sup>2/</sup>   |
| YES  | YES                         | YES                              | YES <sup>5/</sup> or NO  | Prepare funding request<br>Revise APB <sup>1/</sup><br>Revise TEMP <sup>2/</sup><br>Execute mod   | Approve CDD/CPD <sup>2, 5/</sup><br>or requirement<br>Provide funding<br>Endorse APB <sup>1/</sup><br>Endorse TEMP <sup>2/</sup> | Approve APB <sup>1/</sup><br>Approve TEMP <sup>2/</sup>   |
| NO   | N/A                         | NO                               | NO   | Prepare/submit AAP designation request to approval authority<br>Execute mod   | Approve requirement  | Approve AAP designation request   |
| NO   | N/A                         | YES                              | NO   | Prepare/submit AAP designation request to approval authority<br>Prepare funding request<br>Execute mod  | Approve requirement<br>Provide funding   | Approve AAP designation request   |
| NO   | N/A                         | YES                              | YES  | Prepare funding request<br>Prepare APB <sup>1/</sup><br>Prepare TEMP <sup>2/</sup><br>Prepare ACAT <sup>3/</sup> desig request<br>Execute mod | Approve CDD/CPD <sup>2/</sup><br>Provide funding<br>Endorse APB <sup>1/</sup><br>Endorse TEMP <sup>2/</sup>                      | Approve APB <sup>1/</sup><br>Approve TEMP <sup>2/</sup><br>Approve ACAT <sup>3/</sup> desig request |

1/ "Prepare APB" is for the modification only if the modification is to be managed as a separate program. "Revise APB" is for the original ongoing program. See APB format in Consolidated Acquisition Reporting System (CARS) section of the Defense Acquisition Guidebook.

2/ If a new, or change to an existing, CDD/CPD or TEMP is required, see formats for CDD/CPD and TEMP in the CJCSM 3170.01A and the Defense Acquisition Guidebook, respectively.

3/ "Prepare ACAT designation request" is for the "modification only", unless the original program is still ongoing (i.e., in production), in which case the ACAT designation request shall encompass both the original program and the modification(s). See the ACAT designation request and ACAT designation change request content memorandum in the DoN Acquisition and Capabilities Guidebook.

4/ Criteria for "Abbreviated Acquisition Programs" is 1) for weapon system programs, less than \$10M total development expenditure, less than \$25M production or services expenditure in any fiscal year, and less than \$50M

total production or services expenditure for all fiscal years; and 2) for IT programs, less than \$15M program costs in any single year and less than \$30M total program costs.

5/ If answer to column 4 is YES, an approved CDD/CPD or CDD/CPD revision, or an appropriate substitute, is required.

6/ For IT programs, endorsement is provided by the IT functional area manager, approval is provided by the resource sponsor.

## CHAPTER XI: CONFIGURATION MANAGEMENT

### PART A: CONFIGURATION MANAGEMENT POLICY AND PROCEDURES

11.1 Purpose. Configuration Management (CM) is a program management discipline comprised of the combined and systematic application of the following five elements: 1) **Planning and Management**, 2) **Configuration Identification**, 3) **Configuration Verification**, 4) **Configuration Change Management**, and 5) **Configuration Status Accounting**. CM Planning and Management provides the plan to manage the CM process for the context and environment in which CM is to be performed and to provide for monitoring and improving the CM processes. CM planning and management, over the product life cycle, results in defined and effective CM elements. The purpose of CM is to provide an accurate systematic means for documenting and controlling the engineering design of material items so that contract requirements, operational readiness, logistics, and life cycle costs can be properly regulated. Depending upon the complexity of the material item being acquired and the approved acquisition and logistics strategies involved, the application of CM can be rather simple or it can warrant the institution of an elaborate program. CM, when applied over the life cycle of a material item, provides the necessary visibility and control over the item's primary form, fit, function and interface (F3I) attributes as well as its life cycle costs. CM verifies that a material item performs as intended and is identified and documented in sufficient detail to support its projected life cycle requirements (i.e., fabrication or production, operation, maintenance, repair, replacement, and disposal). CM also facilitates the orderly management of change necessary for improving an item's capability, reliability, and maintainability, and correcting inherent design deficiencies. The minimal cost of implementing an adequate CM program is returned many times in cost avoidance. **The lack of a CM Program can become very costly and may result in catastrophic consequences such as failure of equipment and/or loss of human life.**

#### 11.2 Source Documentation and Guidance:

DoD Instruction 5000.2, 12 May 2003

MIL-STD-973 Notice III, "Configuration Management," 13 Jan 1995 (cancelled Sep 2000, replaced by EIA-836)

ANSI/EIA-836 "Configuration Management Data Exchange and Interoperability," June 2002

NAVAIRINST 4130.1D, "NAVAIR Configuration Management Manual," 19 Dec 2006

ANSI/EIA-649, "National Consensus Standard for Configuration Management," 6 Aug 98

MIL-HDBK-61A, "Configuration Management Guidance," 7 Feb 2001

11.3 When Required. CM is required throughout the life cycle of a material item, from concept exploration through Fielding/Deployment, Operational Support, replacement, and disposal.

11.4 Background. The planning, application, and tailoring of CM requirements for a material item being procured must be documented in a CM Plan prepared by the designated Office of Primary Responsibility (OPR) (e.g. program/project/acquisition manager/Integrated Program/Product Team (IPT)). CM Plans must be maintained as living documents and revised as dictated by the life cycle acquisition requirements of the material item(s) being procured. Approved CM Plans and the establishment/use of formal Configuration Control Boards (CCBs) provide the critical foundation for a long and successful CM program. The cognizant OPR/IPT must work closely with the Acquisition Policy and Processes Department (AIR-1.1) to ensure applicable CM Plans and associated contract requirements are adequate.

11.5 Critical Elements. In **Planning and Management** most configuration changes occur in a sole source environment, the initiation of an Engineering Change Proposals (ECP) should be a well-planned and coordinated effort between the government and contractor. A clear mutual understanding of the ECP objective, technical scope and the Government's performance, cost and schedule constraints shortens the lead-time for ECP preparation. It also results in a complete and comprehensive proposal to facilitate timely and effective implementation. As with most processes, the three C's: Communication, Cooperation and Coordination are the keys to assuring successful change processing. A Configuration Management Plan CMP includes:

- application of the appropriate level of CM functions throughout the product life cycle;
- assignment of CM functional responsibilities to various organizational elements;
- training of CM personnel and any others who have CM responsibilities;

- determination and application of adequate resources (including CM software tools) and facilities for product implementation;
- measurements as an indicator of performance and a basis for continuous improvement;
- performance of Configuration Management by suppliers and subcontractors;
- integration of the organization's product configuration information processes;
- protection of the intellectual capital of the organization, and
- much more.

**Configuration Identification** consists of approved documentation that defines the F3I attributes of a material item. **Configuration Verification** are used to verify such documentation is accurate and will satisfy life cycle requirements. **Configuration Change Management** is used to regulate configuration change to a material item and its documentation. Configuration control is accomplished primarily through the use of ECP approved by a CCB. **Configuration Status Accounting (CSA)** is used to record the implementation of approved configuration changes to a material item and its approved documentation. All four of these CM elements are critical to establishing a successful CM Program. The overall success of a CM program is dependent upon initial OPR/IPT planning and contractual application, especially the CM Statement of Work (SOW). Additionally, a special Section "H" contract clause, entitled "Configuration Control Procedures," should be included in acquisition contracts for designating the approval authority for Class I & II ECPs and Requests for Minor & Major Deviations (RFDs). (See MIL-HDBK-61A).

11.6 Responsibilities. AIR-1.1 is responsible for developing and maintaining the CM policy and procedures governing Naval Aviation. This includes authorizing and administering Decentralized (PM Chaired) CCBs. When chartered by AIR-1.1 to operate a Decentralized CCB, PMs are agreeing to comply with the current CM policy and procedures of NAVAIRINST 4130.1D.

11.7 Configuration Steering Boards. ASN(RD&A) memo "Configuration Steering Boards" dated May 7, 2008, directs that the DoN forum for CSBs will be Gate 6 Sufficiency Reviews and not Requirements Resources Review Boards (R3Bs). Appropriate OSD and Joint Staff personnel shall be invited to the Gate reviews. Each Gate 6 Review/CSB must satisfy criteria specified in the original CSB memo dated July 30, 2007 in order to successfully complete the review.

#### 11.8 Lessons Learned

11.8.A All acquisition programs are required to have CM Plans approved by AIR-1.1. Programs that don't have approved CM Plans eventually experience costly logistical problems with the material item(s) being delivered to the Fleet. This unfortunate scenario greatly diminishes our war-fighting capabilities.

11.8.B The inadvertent or sometimes deliberate misclassification or downgrading of proposed Class I ECPs to Class II will inevitably result in costly acquisition and logistical problems, especially in the areas of supply/support (i.e., spare and repair parts).

11.8.C The improper practice of using Rapid Action Minor Engineering Changes (RAMECs) to retrofit Class I ECP production changes will inevitably drive up life cycle costs. This is especially true of Operational and Support (O&S) Costs, because it forces Fleet personnel to perform a variety of unplanned and unbudgeted modification tasks.

11.8.D Flight Clearances (FCs) do not and cannot be used to authorize configuration changes/modifications to Naval Aircraft. This authority, with the exception of the one aircraft prototype/modification allowed by OPNAV 4790.2, "Naval Aviation Maintenance Procedures (NAMPP)", resides with the NAVAIRSYCOM Configuration Control Board (CCB) managed by AIR-1.1. Technical Directives (TDs) are increasing the costs of the Navy Flying Hour Program (NFHP) by redirecting maintenance funds to satisfy unplanned and unbudgeted maintenance actions. As a result, the NFHP is absorbing these additional costs at the expense of the entire NFHP program. During ECP staffing, cognizant Logistics Managers must identify and coordinate any real or potential NFHP cost impact with OPNAV (CODE N88).

11.9 POC: Daniel K. Christensen, AIR-1.1, (301) 757-8065

## CHAPTER XI: CONFIGURATION MANAGEMENT

### PART B: ENGINEERING CHANGE PROPOSAL PROCESS

11.9 Purpose. Engineering Change Proposals (ECPs) are generally requested from Original Equipment Manufacturers, Fleet Readiness Centers (FRCs), or any other Government or commercial source for incorporating design changes into material items.

#### 11.10 Source Documentation/Guidance:

MIL-STD-973, "Configuration Management", 13 Jan 1995 (cancelled Sep 2000, replaced by EIA-836)  
ANSI/EIA-836, "Configuration Management Data Exchange and Interoperability," June 2002  
NAVAIRINST 4130.1D, "NAVAIR Configuration Management Policy," 19 Dec 2006  
ANSI/EIA-649, "National Consensus Standard for Configuration Management," 6 Aug 98  
MIL-HDBK-61A, "Configuration Management Guidance", 7 Feb 2001 (see Appendix D entitled "ECP Management-Guide")

11.11 Critical Prior Events. Conduct engineering investigations to define the scope of the change and find possible solutions to meet the identified requirement. Hold working meetings with contractors and cognizant field activities, logistics managers, and program management personnel to refine the change and establish an adequate acquisition strategy and plan. The PM/IPT initiates the Program Funding Change Proposal (PFCP) and budget process. The AIR-4.1 Class Desk or project engineer drafts the Procuring Contracting Officer (PCO) letter requesting the ECP. The PM ensures that there is an approved PFCP (if required), a decision memorandum and a proper CCB Request/Directive, including logistics impact, prior to submitting the ECP to the Change Control Board (CCB) for approval. Maximum use of Appendix D to MIL-HDBK-61A is recommended. This ECP management process was initially created by NAVAIRSYCOM and subsequently adopted for use by OSD and Industry.

#### 11.12 Lessons Learned

11.12.A NAVAIR typically processes between 900-1,300 Class I ECPs, Rapid Action Minor Engineering Changes (RAMECs), and Requests for Major Deviations per year.

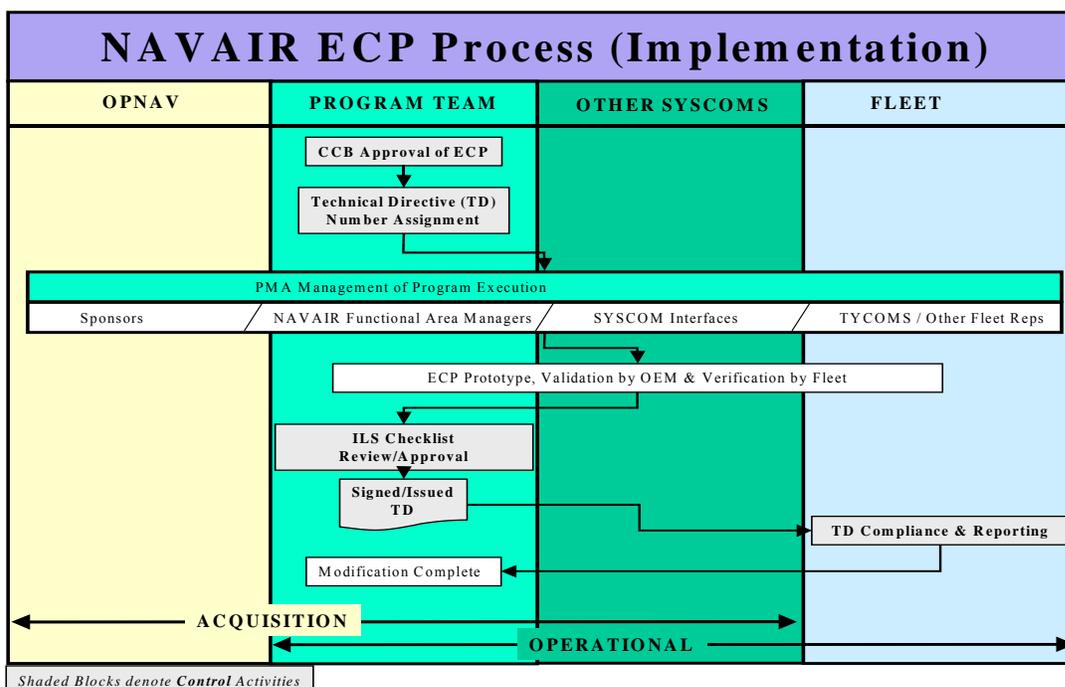
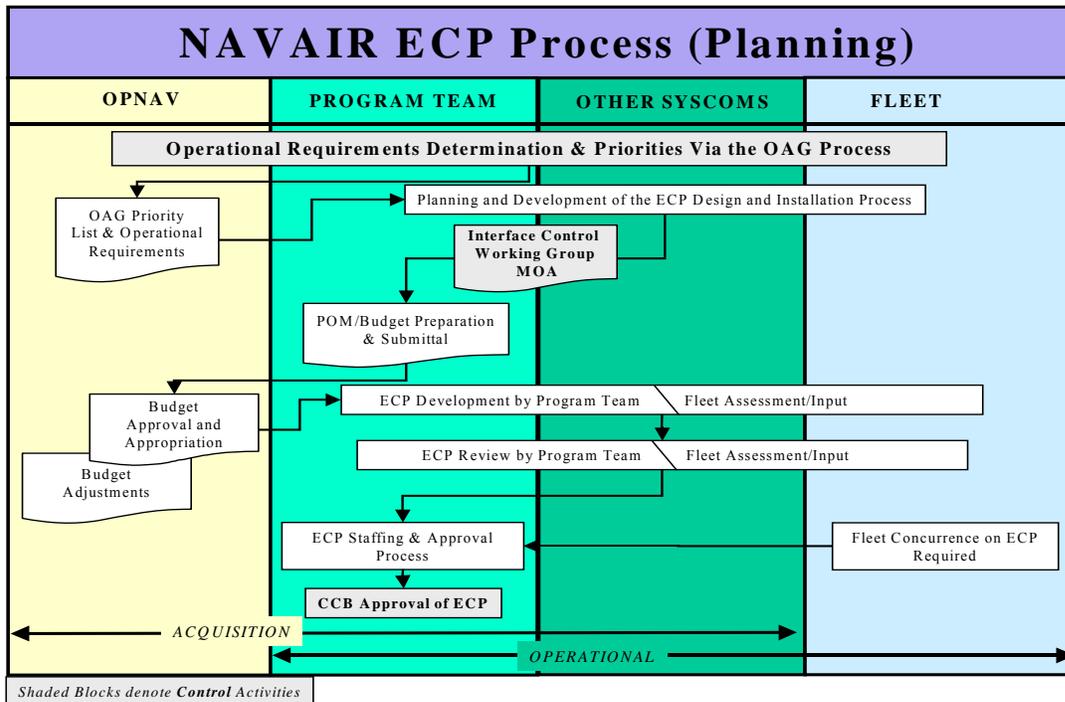
11.12.B The time frame for processing varies greatly from urgent safety related ECPs to routine ECPs/VECPs. Most ECPs require 30 to 90 days for approval. **The most prevalent cause for processing delays is lack of prior coordination and planning.** Many program offices fail to establish early acquisition strategies and plans for their ECPs. At times, even informal planning is overlooked. Good coordination between the Program Office/IPT, Class Desk, APML, PMA205 (Training/Trainer change incorporation responsibility) Contracts, and other Government/commercial resources in the planning and development stages of an ECP is essential to avoid program disaster. Poor planning causes excessive delays in ECP processing as a result of logistical problems or technically inadequate ECPs, which must be subsequently revised and resubmitted. Further delays occur due to lack of tracking and attention by functional managers. The primary delay in implementation of retrofit changes is due to the failure to anticipate the contracting administrative lead-time necessary for obtaining bilateral agreement and/or placing orders. With proper planning, parallel accomplishment of these administration times can be easily accomplished in a timely fashion. Experience has shown that the use of Appendix D to MIL-HDBK-61, entitled "ECP Management Guide," has greatly reduced the ECP preparation, rework, and staffing time for programs which have adopted its use. The need for following these management techniques can not be overstated.

11.12.C Many ECPs are not processed early enough to allow timely obligation of funds, which often results in budget cuts or reallocation of funds required to implement the change.

11.13 The recently implemented "Two-Step ECP Process" has been introduced to reduce the average ECP/modification cycle-time from initial funding to the last modification installation without sacrificing CM process integrity and discipline.

11.14 The ECP/CCB Review and Approval process has been automated as part of the NAVAIR e.Power Program. Use of the automated workflow tool to conduct ECP/CCB reviews and disposition greatly reduces ECP and CCB Request processing time.

11.15 POC: Daniel K. Christensen, AIR-1.1, (301) 757-8065



## CHAPTER XII: COMPETITION & SOURCE SELECTION

### PART A: COMPETITION

12.1 Purpose. Competition is an issue that must be addressed at several points in a program or system's acquisition. Competition can be a powerful and beneficial method of contracting. Conversely, the reasons for not using competition can take time to be approved, and consequently can hold up approval of a program's overall acquisition strategy and of the Acquisition Plan document.

12.2 Background. Consideration of competition in contracting is required by law (Competition in Contracting Act (CICA) of 1984), regulation, and policy. To procure using other than competition requires obtaining specific exception authority, and in most cases approval in the form of a Justification & Approval or Determination & Findings.

#### 12.3 Discussion

12.3.A In the life cycle of a system acquisition, there are three basic types of competition – technical/design competition, production competition, and Maintenance & Logistics type competitions. Technical/design competition occurs early in the acquisition life cycle (during concept refinement, technology development, and/or early stages of system development and demonstration (SD&D)). The objective of concept refinement and technology development (TD) activities in the Defense acquisition life cycle and, therefore the purpose of design competition, is risk reduction, which can be achieved by selecting the one or more concepts or system(s) that will best meet the Government's needs from the competing alternative approaches proposed. Design competition involves two or more contractors competing separate designs without sharing information. A preferred evaluation strategy is to award the TD phase to more than one offeror and then conduct a limited competition at the end of TD to down-select to one contractor for performance of the SD&D phase. Production competition, if it occurs, occurs later when the design specification is stable or when two or more contractors are producing similar or identical systems. Competing contractors may be proposing to the same Government-provided specifications. The objective is generally to obtain the required item at a lower cost or price. Maintenance and Logistics type competitions will be most likely conducted several years after production begins and the Maintenance approach is well established. The ability to compete Depot Level Maintenance depends on the extent to which the Government has data rights and the ability of contractors other than the Original Equipment Manufacture (OEM) to make engineering dispositions.

12.3.B Whereas technical/design competition is relatively short-lived, production competition may be beneficial throughout the production and maintenance phases, until a final competitive buy-out occurs. Production competition frequently requires competitors to build the same system and to share data and know-how. This often results in contractors teaming with one another, enhancing the maintenance of a competitive base.

12.3.C A single, integrated procurement planning agreement should be developed that addresses all critical issues, including:

- ◆ Funding
- ◆ Schedule
- ◆ Configuration management
- ◆ Technology transfer
- ◆ Non-Developmental/Commercial Items
- ◆ Contractual arrangements
- ◆ Second source qualifications
- ◆ Conversion from CFE to GFE
- ◆ Small Business Participation

12.3.D Under the best of circumstances, production competition for a major end-item is a complex undertaking. In some instances it is not possible or advantageous to pursue competition for the end item. The program manager must then aggressively pursue other techniques for controlling and reducing costs. Such strategies include:

- ◆ Subcontract competition
- ◆ Component/subsystem breakout
- ◆ Aggressive value engineering program
- ◆ Use of incentive or award fee contracts
- ◆ Should cost analysis of the sole source prime
- ◆ Product improvement of existing item
- ◆ Use of commercial "off-the-shelf" (COTS) and non-developmental item (NDI) products

12.4 Source Documents: Several detailed references on competition exist, including the Federal Acquisition Regulations (FAR) Part 15, the DoD FAR Supplement (DFARS) Part 215, the Navy/Marine Corps Acquisition Regulation Supplement (NMCARS) Part 5215, DoD Directive 5000.1, DoDINST 5000.2, NAVAIRINST 4200.39B, and various implementing Navy and NAVAIR instructions, including SECNAVINST 5000.2D and NAVAIRINST 4200.5C

12.5 Summary. Competition offers substantial benefits. It also entails some risks. Competition planning must be an integral part of the overall acquisition strategy and must be deliberate and thorough as well as tailored to the specific characteristics of each program.

12.6 POC: Source Selection Process, Alan Goldberg, AIR-4.10E, (301) 757-1810  
Competition in contracting, Jessica Blackwell, AIR-2.1.1, (301) 757-6596

## CHAPTER XII: COMPETITION & SOURCE SELECTION

### PART B: SOURCE SELECTION PLANNING

12.7 Purpose. To provide insight into source selection planning considerations.

#### 12.8 Discussion

12.8.A Every source selection begins with a basic planning stage. Initially, a requirement must be identified and funding must be obtained. Requirements may include aircraft, missile, training systems, components, software, technology advancement projects, maintenance and logistics, management training services, other service contracts, etc. In any case, a strategy for fulfilling the requirement must be developed and the type of source selection to be conducted must be determined. Key personnel need to be identified. A myriad of documentation that justifies and plans the acquisition must be developed and approved. Industrial sources must be identified and polled for input into both the feasibility of the requirement and the strategy for fulfilling the requirement. Draft specification, Statement Of Objective/Statement Of Work (SOO/SOW) and eventually the entire RFP should be sent to Industry for comment. The Draft RFP may be sent to Industry without Section L&M, but eventually a draft Sections L&M should also be sent to Industry for comment. Allowing this opportunity for communication with Industry is an important part of finalizing a high quality RFP and it is an important early insight to Industry to help them put together a high quality proposal. These are two critical elements that will affect how difficult the evaluation of proposals will be. Therefore it is important that sending Draft RFP to Industry for comment be included in the program/source selection schedule. Ultimately the Request for Proposal (RFP) is developed and released, proposals are received, the evaluation is conducted, the source is selected and the contract is awarded. Below is some insight into source selection planning considerations that will improve your ability of completing these source selection efforts on time.

12.8.B Initiating RFP development early enough in the process is one of the keys to a successful source selection schedule. Whenever the scheduled release of the RFP is delayed, there is a tendency towards revising the evaluation schedule to avoid a slip in the award date. This reduces the evaluation process time, thereby increasing the risk of a delay in contract award. Innovative source selection strategies may minimize that risk; however, there are unknowns in the process such as the number of proposals and the quality of the proposals, which tend to be the determining factors in the ability to meet the schedule. The best approach to be used at the start of the process is to plan a low risk schedule by paying particular attention to the details of the RFP development. Careful scrutiny of the Statement of Work/Statement of Objectives (SOW/SOO), the specification, and the Contract Line Item Number (CLIN) structure must be made since these elements of the RFP need to be complete and ready for issue in order to complete the Section M evaluation criteria and the Section L proposal instructions.

12.8 C Development of the Evaluation Criteria (Section M) and the Proposal Instructions (Section L) can be initiated once the requirements are fairly stable. Sections L&M are critical documents that will set the path towards the selection. Section M identifies what will be evaluated and Section L instructs the Offerors what to put in the proposal in response to the Request For Proposal (RFP). The documents must be developed such that there is a clear path from the Evaluation Criteria Factors, subfactors and lower level criteria (i.e. areas to be evaluated) to the Proposal Instruction Volumes, Books and paragraphs and then into the Evaluation (i.e. areas which will be assigned worksheets where Subject Matter Expert evaluators document their evaluation of that area). Sections L&M should be developed by a team of program experts and stakeholders. The preferred approach for initiating and developing Sections L&M is as followed.

- 1) Set up a meeting (probably 2 days) with a working group of program experts and stakeholders. Preparation for the meeting should include a review of the Acquisition Strategy, CDD, SOO, Specification, other requirements, Work Breakdown Structure (if applicable), and Section B (CLINs). The following actions would occur at this meeting:
  - a) Start with training on how to develop Section L and M.
  - b) Conducting a brainstorming session to identify the evaluation discriminators.
  - c) Organize the discriminators into Factors, Subfactors (if needed) and areas to be evaluated.

- d) Draft Section M based on the results of the meeting, using the Section M Clause Book Template as a guide.
  - e) Develop a Section L outline based on the Drafted Section M.
  - f) Assign actions to complete Section L. Preferably the Team Leaders have been assigned and can be tasked to lead the development of their Volume.
- 2) In developing Section L, use the Section L Clause Book as a guide and leverage "re-use" language from other RFPs as a starting point. The General Section, the Past Performance Volume and the Experience Volume will not require too much change. The Technical Volume will require most of the work. The Cost/Price Volume will also require some level of work, but much of the language and format can be leveraged from other RFPs for similar programs.
  - 3) Develop a Cross Reference Matrix (CRM) that relates the Proposal Instructions to the Requirements. This CRM becomes part of Section M, but should also be used as a tool to identify disconnects between the Proposal Instructions and the requirements. This Cross Reference Matrix should also be used to help identify the evaluator assignments, generate the evaluation worksheets and to guide the evaluators.
  - 4) In general, the Source Selection Evaluation Board and other key program members should meet on a weekly basis from this point on in order to manage the process.
  - 5) After Sections L&M are complete, the PCO can assemble the entire RFP and submit it to the SSEB for review. This review should be an integrated review of the entire RFP to ensure accuracy, consistency, clarity and cohesiveness. Unclear requirements or disconnects with between any parts of the RFP can result in flawed proposals that will affect our ability to select the true best value, raise the risk of protest and/or result in unexpected adverse results during contract performance. The team should meet to resolve all comments and to finalize the RFP. The RFP is then ready to be submitted to the Legal Review Board (LRB), if required. (The program's Legal Counsel can advise if an LRB is required.)
  - 6) After the RFP incorporates the LRB's comments, the RFP is ready for review by the Source Selection Advisory Council (SSAC) and/or the Source Selection Authority (SSA). If a draft RFP with Section L&M is to be released, then concurrence from the SSAC Chair with his/her consultation with the SSAC members or concurrence from the SSA is required in addition to Legal review. Typically, the order of importance of factors and subfactors are not disclosed to Industry in Draft Section M. Release of a Draft RFP without Sections L&M or parts of the RFP other than Sections L&M can be released at the discretion of the Contracting Officer, without SSAC or SSA concurrence.

12.8 D. An important part of planning for the evaluation is setting up a limited access share folder and scheduling an evaluation room. (Contact Linda Carrico to schedule AIR-4.10E managed evaluation rooms and to aide in setting up share folders.)

- 1) Share folders should be set up early in the process to facilitate development of the RFP, particularly Sections L&M and evaluation planning document such as the Source Selection Plan (SSP), the Evaluation Plan, Pre-solicitation/Pre-Proposal Conference briefs, etc. It is also useful in sharing various acquisition/source selection documents and training briefings. The share folder is also an important resource for managing the evaluation. The share folder is where evaluators can document their findings and where various documents (e.g. worksheets, SSEB Report, Evaluation Notices, and Evaluation briefings) can be process and filed.
- 2) Scheduling of evaluation rooms should occur as soon the time of the evaluation and the number of evaluators can be reliably predicted. Evaluation rooms managed by AIR-4.10E are limited and may not be available. In the event that those spaces are not available, the Program Office would need to seek out other facilities on the base. When seeking out these other facilities, attempt to obtain facilities that have NMCI connections and NMCI computers because without them, the Share Folder can not be accessed.

12.8.E The following are some critical milestones and process times to consider in developing a low risk source selection:

- 1) SSEB review of the RFP
- 2) release of a draft RFP with Sections L&M to industry for comments;
- 3) Legal Review Board - a 2 week Legal Counsel review of the RFP;
- 4) Source Selection Advisory Council (SSAC) and Source Selection Authority (SSA) Meetings to approve the Source Selection Plan (SSP) and release the RFP - 2 weeks after the legal review;

- 5) RFP release (1-2 days after the SSAC/SSA Meeting); and
- 6) proposal receipt - 45-60 days after RFP release.

12.8 F Training is an essential part of planning for the evaluation. Training modules provided at the appropriate time include L&M Development, SSEB Training, and Technical, Past Performance, Experience, Cost/Price training for Team Leaders and Evaluators.

12.8.G Also it should be noted that a low risk schedule should consider a 5 to 6 month process time from proposal receipt through contract award. Other milestones that need to be considered in the process include establishment of a technical library for prospective offerors, development of Government Planning estimates, and development of the Evaluation Plan.

12.8.E Source Selection Office (SSO) personnel can provide valuable insight into the source selection process, and can also provide the program team with insight into various acquisition strategies based on lessons learned. The Source Selection Office (SSO), AIR-4.10E, should be contacted if it is anticipated that they will be requested to conduct a source selection. SSO personnel may serve as the SSEB Chair. Prior to RFP release, SSO personnel will direct the development of the Evaluation Criteria, the Proposal Instructions, the SSP, the Evaluation Plan, and the SSAC / SSA briefings. SSO personnel may also be asked early in the process to be advisors or may be consulted on specific issues at any time even when not participating directly in a source selection. The SSO consists of eight Expense Operating Budget (EOB) funded source selection experts and exists as a valuable resource to the Team. However, due to the limited number of people in the SSO it is best to give the SSO Director as much advance warning as possible such that the SSO can properly plan its workload and meet the demands of the Team to the greatest extent possible.

12.9 SSO POCs:

|                 |                      |                |
|-----------------|----------------------|----------------|
| Alan Goldberg   | Director             | (301) 757-1810 |
| Kevin Kennedy   | Deputy Director      | " 757-1806     |
| Jim Stanford    | Aerospace Engineer   | " 757-1807     |
| Tom Popp        | Aerospace Engineer   | " 757-1805     |
| Carl Savillo    | Aerospace Engineer   | " 757-1808     |
| Stephen Daniels | Aerospace Engineer   | " 757-1812     |
| Glenn Woods     | General Engineer     | " 757-1823     |
| Carlee Stemple  | Operations Research  | " 757-9388     |
| Linda Carrico   | Management Assistant | " 757-1811     |

## **CHAPTER XII: COMPETITION & SOURCE SELECTION**

### **PART C: PAST PERFORMANCE AND BEST VALUE**

12.10 Purpose. To provide the NAVAIR position on the use of past performance/systemic improvement and the best value concept in the source selection process.

#### 12.11 Discussion

12.11.A While the lowest price or lowest total cost to the Government is properly the deciding factor in many source selections, the Government may select the source whose proposal offers the best value to the Government based on criteria other than lowest cost or price. Past performance risk assessment is used as a tool in the source selection process. NAVAIR has developed a system of evaluating contractor past performance, which is addressed in NAVAIRINST 4200.39B. The objective is to highlight poor performers, hold contractors accountable for their past performance, reduce the Government's overall risk associated with the acquisition, and receive the best value overall for the money spent. Areas to be assessed include areas such as technical, quality, cost, and adherence to established schedules.

12.11.B It is important to note that the best value concept is not limited only to the use of past performance in the selection process. A best value selection may use a combination of not only performance, but technology, price, and whatever other factors are considered most advantageous to the particular requirement. Its use can conceivably involve complex issues with selections based not only on the above attributes, but on other initiatives as well, such as mobilization capability, security considerations, and enhancement or retention of certain types of socioeconomic sources or domestic production capabilities. The primary consideration should be which offeror can perform the contract in a manner most advantageous to the Government, as determined by the evaluation of proposals according to the established evaluation criteria.

12.12 Summary. Planning is key in obtaining the most for the Navy's money. Consideration of past performance risk assessment in source selections should begin as early as possible. When applicable, reference to its intended use should be made in the Acquisition Plan, while the specific clauses for past performance/systemic improvement should be in the Request for Proposals. NAVAIR will continue evaluations to develop the best method of using past performance and other criteria in the source selection process.

12.13 POC: Alan Goldberg, AIR-4.10E, (301) 757-1810

## CHAPTER XIII: ACQUISITION LOGISTICS SUPPORT

### PART A: INDEPENDENT LOGISTICS ASSESSMENT PROCESS

#### 13.1 Purpose

13.1.A Department of Defense policy requires the program manager, as the Total Life Cycle Systems Manager, to conduct logistics management activities throughout the system life cycle to ensure support system performance, affordability, cost, and schedule are continuously assessed and used as key factors in making program tradeoffs and decisions. It is incumbent on the milestone decision authority to validate that the system will meet established performance requirements as well as total ownership cost targets at major program reviews and milestone decisions.

13.1.B A primary step in achieving this is the periodic assessment of a program's integrated logistics support planning, the implementation of that planning, and the ability of the logistics program to meet established performance requirements. These assessments must be performed at each major milestone. In addition, formal reviews with the warfighter are required at initial operational capability and full operational capability. In other words, the actual logistics program performance must be continually compared against performance expectations.

13.1.C The Independent Logistics Assessment (ILA) Branch (AIR-6.9.2.3), which is a product support team, conducts independent logistics assessments (ILAs) on ACAT I through IV programs for the NAVAIR team. The assessments are accomplished on a schedule, which supports each acquisition decision milestone and both initial as well as full operational capability.

13.2 Source Documents: SECNAVINST 4105.1A of 5 March 2004 and the SECNAV Independent Logistics Assessment Handbook. The handbook includes the ILA checklist. The ILA instruction, the ILA handbook, and the NAVAIR ILA process guide have been distributed to the APEO(L)s so that they can distribute them to the individual program offices.

13.3 Responsibility. The PEO is responsible for ensuring an ILA is accomplished. AIR-6.0 supports the PEOs by recommending ILA certification to the PEOs, based on the results of an ILA. AIR-6.9.2.3, in concert with the APML, IPT, and appropriate competency representatives, is responsible for ensuring that each NAVAIR acquisition program is assessed for identification of logistics risks and the adequacy of the logistics program. The ILA assessment schedule is distributed to the APEO(L)s on a monthly basis. Additionally, the ILA team leader will notify the APML of an upcoming ILA and work with the APML towards a successful assessment

13.4 Assessment Initiation. The ILA team leader will establish contact with the PMA, IPT leader, APML, etc., to explain the ILA policy/process, and establish an assessment schedule that supports the milestone decision. Starting the assessment approximately 6 months prior to the milestone should provide adequate time to complete the assessment and complete the necessary follow-up briefings.

13.5 The Assessment. The following logistics factors require review during an ILA regardless of the support strategy:

- Integrated Logistics Support (ILS) Management
- ILS Budgeting and Funding
- Design Interface
- Maintenance Planning
- Support Equipment
- Supply Support
- Manpower, Personnel, and Training
- Packaging, Handling, Storage, and Transportation
- Configuration Management
- Product and Technical Data

- Environmental, Safety, and Occupational Health
- Facilities
- Computer Resources and Software Support

13.6 Assessing the ILS Factors. To assess a specific logistics factor, the following general steps should be followed. Figure 1 on the next page provides a flowchart of the general assessment process, depicting the steps noted below.

1. Review the basic program requirements, including: Performance Agreements; Key Performance Parameters (KPPs) and critical system parameters in the Initial Capabilities Document (ICD, formerly the Mission Need Statement), the Capability Development Document (CDD), and the Capability Production Document (CPD) (the CDD and the CPD replacing the Operational Requirements Document), and the Acquisition Plan (AP), depending on program phase.
2. Review the logistics support strategy and Integrated Logistics Support Plan (ILSP) (also referred to as Acquisition Logistics Support Plan)/User Logistics Support Summary (ULSS) to ensure the basic requirements have been translated into logistics requirements. The ILSP/ULSS should also provide a mapping to the primary support product/technical documentation.
3. Review the primary support documentation for each ILS factor (e.g., management) to ensure logistics requirements are further detailed and required analyses have been performed. This should include a review of the Logistics Requirements and Funding Summary (LRFS) (or similar document) and associated funding documents to ensure support funding requirements for each ILS element are appropriately identified, funding is available, and shortfalls identified. Ensure each ILS element is funded in the year funding is contractually required to produce the end item in the correct timeframe per the master ILS schedule.
4. Review the contract/tasking to ensure appropriate requirements have been flowed to the contractor and other activities.
5. Review ILS factors against the master program schedule. Review reasonableness of the tasks and likelihood of completion of each ILS task within the allocated schedule and man-loading.
6. Determine if the performance agreements, specified supportability KPPs, and critical system parameters in the ICD/CDD/CPD can be met from a supportability standpoint. Depending on program phase, the information required to perform this assessment can generally be found in Reliability, Availability and Maintainability (RAM) models and predictions, development and operational test information documents, RAM/Built In Test (BIT) requirements in the contract/statement of work, RAM analyses and test results, and in Chief of Naval Operations (CNO) sponsored tests, etc. If the RAM KPPs and critical system parameters of the ICD/CDD/CPD are not met, then the ILS areas must be reassessed to determine what impact the lower RAM numbers will have on the supportability of the system. For instance, if the actual reliability number does not meet the reliability stated in the CDD and spares are being reviewed, then the originally calculated requirements for spares may not be correct and may need to be recalculated. If manpower is being reviewed, the manpower analysis may be suspect since it does not take into account more frequent failures and longer times to repair and maintain systems. If there is an impact, assess risk to the program and document a finding.
7. Document risks/issues in the ILA report.

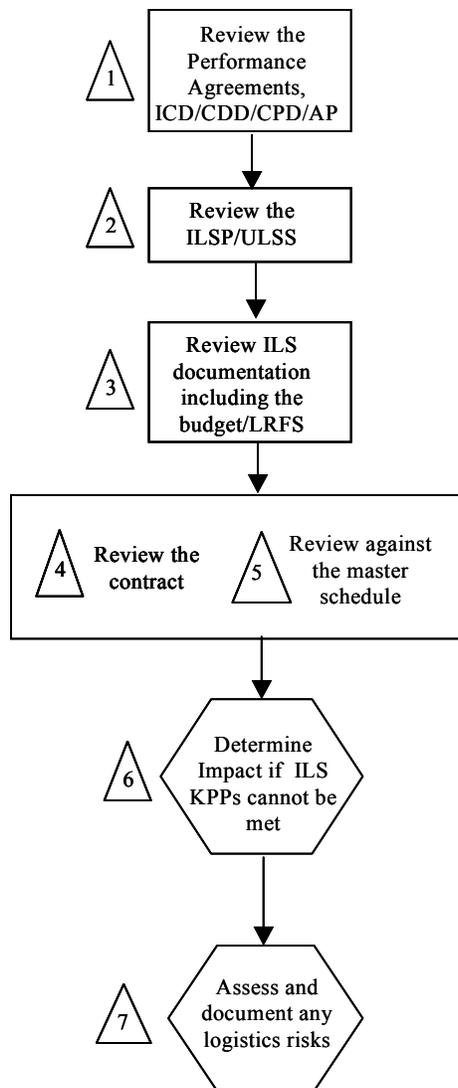


Figure 1. General Assessment Process

13.7 Certification. The result of the assessment is certification of the program as being red, yellow, or green. Additionally, action items are identified for the program office to resolve. Once all issues are identified, with mitigation efforts accepted for identified risks, the ILA will recommend certifying to the APML, IPT leader, PMA, APEO(L), and PEO that the program is supportable. The certification recommendation memorandum is prepared for AIR-6.0 signature, and addressed to the appropriate PEO. The actual certification is approved by the PEO. The certification recommendation is in accordance with the logistics certification criteria presented in enclosure (1) of SECNAVINST 4105.1A.

13.8 POC: John Harris, AIR-6.9.2.3, (301) 757-3085

Additional information can be found on the ALSP web site at: <http://logistics.navair.navy.mil/training/apml.cfm>.

## CHAPTER XIII: ACQUISITION LOGISTICS SUPPORT

### PART B: LOGISTICS REQUIREMENTS FUNDING SUMMARY (LRFS)

13.9 Purpose. The Logistics Requirements Funding Summary (LRFS) or a similar document is a breakdown of product support functions and sub-functions to establish a minimum level of product support. It identifies support resource requirements and the funds available to meet those requirements. The summary displays requirements versus funding for all ILS elements and related disciplines, by fiscal year and appropriation, and is traceable to logistics support plans. During the independent logistics assessment (ILA), the assessors review the LRFS (or similar document) and associated funding documents to ensure support funding requirements for each ILS element are appropriately identified, funding is available, and shortfalls identified. Ensure each ILS element is funded in the year funding is contractually required to produce the end item in the correct timeframe per the master ILS schedule.

13.10 Source Documentation: SECNAVINST 5000.2D

13.11 Discussion

13.11.A The acquisition of a system or equipment involves not only the procurement of hardware, but also the determination of required funds to establish and implement a Supportability program. The LRFS documents the support funding required for each acquisition program. The main objectives of the LRFS are to:

- a. Provide visibility of support requirements.
- b. Inform resource and assessment sponsors of support requirements.
- c. Serve as the format for presentation of support and associated funding requirements at all logistics assessments.
- d. Satisfy requirements of existing policy to plan for and document supportability requirements and associated funding.

13.11.B The LRFS is the consolidated “requirements” baseline format to be used by Logistics Managers (LMs) and Program Managers (PMs) to identify the Supportability related costs and funding. The LRFS requirements must be based on program phasing and relevant logistics determinants such as critical program decisions, and other items or issues which directly affect logistics support of the planned acquisition of the weapon system. Based on this, the following information should be considered:

- a. Procurement Schedules
- b. Delivery Schedules
- c. Site Activation and Installation Schedules
- d. Peacetime and Wartime Utilization Factors
- e. Readiness and Sustainability Thresholds
- f. Operational Availability (Ao)
- g. Operational Requirements
- h. Mission Capability (MC) Rate
- i. Support Activation /Transition Organic Support
- j. Contractual Vehicles
- k. Mean-Time-To-Repair (MTTR)
- l. Mean-Time-Between-Failures (MTBF)

13.11.C Programmatic changes that have an impact on the above factors require analyses that could lead to a revision to the LRFS. The LRFS, when developed at program initiation, occurs with the development of other management tools such as the Acquisition Logistics Support Plan (ALSP) and various conceptual designs, analyses, and studies. The Operational Requirements Document (ORD), Test and Evaluation Master Plan (TEMP), and other key documents provide the foundation for the entire support planning function. The ALSP represents the plan to acquire and deliver the necessary support that has been outlined by the basic program requirements documents. The LRFS is directly derived from the ALSP, reflecting the resources necessary to fully execute the end item program, and must be updated to remain consistent with the evolving Supportability program.

13.12 POC: John Harris, AIR-6.9.2.3, (301) 757-3085

Additional information can be found on the ALSP web site at: <http://logistics.navair.navy.mil/training/apml.cfm>.

## **CHAPTER XIII: ACQUISITION LOGISTICS SUPPORT**

### **PART C: ACQUISITION LOGISTICS SUPPORT PLAN (ALSP)**

13.13 Discussion. The Acquisition Logistics Support Plan (ALSP) is used to establish, document, and maintain program Acquisition Logistics Support. The development of the ALSP for NAVAIR logistics programs also provides planning information for the PMA/IPT in using, managing, and planning support for aviation weapon systems and equipment. The ALSP is not limited to a specific format but the ALSP shall be used to establish, document, and maintain program Acquisition Logistics Support.

13.14 POC: John Harris, AIR-6.9.2.3, (301) 757-3085

Additional information can be found on the ALSP web site at: <http://logistics.navair.navy.mil/training/apml.cfm>.

## CHAPTER XIII: ACQUISITION LOGISTICS SUPPORT

### PART D: ACQUISITION LOGISTICS HANDBOOK (ALH)

13.15 Purpose. MIL-HDBK-502 DoD Acquisition Logistics Handbook (ALH) offers guidance on acquisition logistics as an integral part of the systems engineering process. It provides general guidance to members of the DoD workforce directly concerned with the supportability of material systems or automated information systems.

#### 13.16 Source Documents:

Defense Acquisition Guidebook  
MIL-HDBK-502 DoD Acquisition Logistics Handbook  
MIL-PRF-49506 Performance Specification Logistics Management Information  
DI-ALSS-81529 Logistics Management Information Data Products  
DI-ALSS-81530 Logistics Management Information Summaries  
NAVAIR Contracting for Supportability Guide  
Defense Systems Management College Acquisition Logistics Guide

#### 13.17 Discussion

13.17.A Acquisition logistics is a multi-functional, technical management discipline associated with the design, development, test, production, fielding, sustainment, and improvement/modification of cost-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 requirements, that the system can be cost-effectively supported throughout its life-cycle, and that the infrastructure elements necessary for the 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. Since these costs are largely determined early in the system development period, it is vitally important that system developers evaluate the potential operational and support costs of alternative designs and factor these into early design decisions. Supportability considerations shall be integral to all trade-off decisions.

13.17.B The ALH was developed by the joint services technical working group under the direction of the Office of the Deputy Undersecretary of Defense for Logistics. It is the replacement document for MIL-STD-1388-1A Logistics Support Analysis (LSA) and may be used on all new and major modifications to acquisition systems/equipment. This handbook is for guidance only and cannot be cited in a contract as a requirement. Included in this handbook are the following areas of interest:

- How systems engineering fits into the acquisition process
- Supportability analyses as part of the systems engineering process
- How to develop supportability requirements
- The acquisition and generation of support data
- Logistics considerations for contracts
- The logistician's role on integrated product teams
- Samples of Supportability Analysis Summaries (SAS)
- Samples of LMI Worksheet 1 – Supportability Analysis Summaries
- Samples of LMI Worksheet 2 – Data Products Deliverables

13.17.C The acquisition logistics activities normally encompass the following support elements identified below:

- Maintenance Planning. Planning required to evolve and establish maintenance concepts and requirements for the lifetime of the system. Because of the impacts on systems design and the long term operations and support cost implications, a cost-effective support concept needs to be established early in the program after careful consideration of all viable alternatives and refined concurrently with the design effort into detailed maintenance plans.

- Manpower and Personnel. Military and civilian personnel with the skills and grades required to operate and support the system over its lifetime at peacetime and wartime rates. Program managers should strive to minimize the quantity of personnel and the skill levels required to operate and maintain systems.
- Supply Support. Secondary items necessary to field and support the system including consumables, repair parts, and spares.
- Support Equipment. All equipment required to support the operation and maintenance of the system. This includes associated multi-use end items, ground handling and maintenance equipment, tools, metrology and calibration equipment, test equipment, and automatic test systems. This also includes automatic test equipment hardware and operating system software, test program sets that include the interface test adapter hardware, and software programs to test individual weapon electronic items, and the associated software development environments and interfaces.
- Technical Manuals and Technical Data. Scientific or technical information recorded in any form or medium (such as manuals and drawings). Computer programs and related software are not technical data, whereas the documentation of computer programs and related software is technical data. Also excluded are financial data or other information related to contract administration.
- Training and Training Devices. Processes, procedures, techniques, training devices, and equipment used to train civilian and active duty and reserve military personnel to operate and support the system. This includes individual and crew training (both initial and continuation) and new equipment training – initial, formal, and on-the-job training.
- Computer Resources Support. Facilities, hardware, system software, software development and support tools, documentation, automatic test systems, and people needed to operate and support embedded computer systems.
- Facilities. Permanent, semi-permanent, or temporary real property assets required to support the system, including conducting studies to define facilities or facility improvements, locations, space needs, utilities, environmental requirements, real estate requirements, and equipment.
- Packaging, Handling, Storage, and Transportation. Resources, processes, procedures, design considerations, and methods to ensure that all system, equipment, and support items are preserved, packaged, handled, and transported properly, including environmental considerations, equipment preservation requirements for short and long term storage, and transportability.
- Design Interface. The acquisition logistics interface with the design process is through the systems engineering process. Supportability must be considered as part of the requirements generation and analysis activities and continues through design, test and evaluation, production, and fielding. The early focus should result in the establishment of support related design parameters. These parameters should be expressed both quantitatively and qualitatively in operational terms and specifically relate to systems readiness objectives and the support costs of the system.

### 13.18 Responsibilities

13.18.A The APML, as a participant on the program IPT, shall develop and document a support strategy for life-cycle sustainment and continuous improvement of product affordability, reliability, and supportability, while sustaining readiness. This effort shall ensure that system support and life-cycle affordability considerations are addressed and documented as an integral part of the program's overall acquisition strategy. The support strategy shall define the supportability planning, analyses, and trade-offs conducted to determine the optimum support concept for a material system and strategies for continuous affordability improvement throughout the product life cycle.

13.18.B The APML shall conduct supportability analyses as an integral part of the systems engineering process, beginning at program initiation and continuing throughout the program's life cycle. The results of these analyses shall form the basis for the related design requirements included in the system performance specification and acquisition logistics support plan (ALSP). The results shall also support subsequent decisions to achieve cost-effective support throughout the system life cycle. The APML shall permit broad flexibility in contractor proposals to achieve program supportability objectives.

13.18.C The APML, in coordination with Military Service logistics commands, shall develop a life-cycle product acquisition logistics support plan (i.e., ALSP). The plan shall include actions to assure sustainment, and continually improve product affordability for programs in initial procurement, reprourement, and post-production support. The plan shall demonstrate an integrated acquisition and logistics strategy for the remaining life of the system/subsystem. The plan shall be updated at least every five years during the product's life cycle, or with greater frequency, depending on the pace of technology. As a minimum, the plan shall address how the program will accomplish the following objectives:

- Integrate supply chains to achieve cross-functional efficiencies and provide improved customer service through performance-based arrangements or contracts.
- Segment support by system/subsystem and delineate agreements to meet specific customer needs.
- Maintain relationship with the user/warfighter based on system readiness.
- Provide standard user interfaces for the customer via integrated sustainment support centers.
- Select best-value, long-term product support providers and integrators based on competition.
- Measure support performance based on high-level metrics, such as availability of mission-capable systems, instead of on distinct elements such as parts, maintenance, and data.
- Improve product affordability, system reliability, maintainability, and supportability via continuous, dedicated investment in technology refreshment through adoption of performance specifications, commercial standards, and commercial and non-development items where feasible, in both the initial acquisition design phase and in all subsequent modification and reprourement actions.

13.19 For a copy of the ALH follow the link to Logistics Tools, then ALH on the following website: <http://logistics.navair.navy.mil>. Also for additional related information refer to the "NAVAIR Logistics Handbook" located on the NAVAIR Knowledge Management System (KMS) website at the Logistics Guidance tab.

13.20 POC: Norman Way, AIR-6.9.2.3, (301) 757-8256

## CHAPTER XIII: ACQUISITION LOGISTICS SUPPORT

### PART E: LOGISTICS MANAGEMENT INFORMATION (LMI)

13.21 Purpose. MIL-PRF-49506 Performance Specification Logistics Management Information (LMI) is a contractual method for acquiring support and support related engineering and logistics data from contractors in compliance with DoD acquisition and logistics reform initiatives.

13.22 Source Documents:

MIL-PRF-49506 Performance Specification Logistics Management Information  
DI-ALSS-81529 Logistics Management Information Data Products  
DI-ALSS-81530 Logistics Management Information Summaries  
MIL-HDBK-502 DoD Handbook Acquisition Logistics  
NAVAIR Contracting for Supportability Guide

13.23 Discussion

13.23.A The LMI was developed by a joint services technical working group under the direction of the Office of the Deputy Undersecretary of Defense for Logistics. It is the replacement document for MIL-STD-1388-2B Logistics Support Analysis Record and may be used on all new and major modifications to acquisition systems/equipment. It represents a fundamental change in the way data requirements are levied on contracts, and does not contain any "how to's". This new specification is designed to minimize oversight and government-unique requirements and allow contractors maximum flexibility in designing systems and developing, maintaining, and providing support and support related engineering data through the system engineering process.

13.23.B The LMI may be tailored up or down for acquiring support data unique to each program's requirements. Contractors are strongly encouraged to offer support and support related engineering data to the Government in their own commercial formats if the data is readily available and can cost-effectively meet DoD's needs. The preferred method of delivery is for on-line access to the contractor's database to eliminate the costly delivery of paper copies.

13.24 Responsibilities. The APML should determine what acquisition logistics products are to be developed and how they will be delivered (magnetic tape, disk, etc.). In keeping with current and evolving policy regarding reduction of data requirements, the importance of acquiring appropriate data must be emphasized. This data forms the baseline from which acquisition logistics products (e.g., technical pubs, provisioning, training, maintenance plans, etc.) are developed. The APML should work closely with functional area LEMs, cognizant IPT members, and others to determine what data requirements from the LMI will be needed. This logistics planning data will also be included in the acquisition logistics support plan (ALSP).

13.25 Content

13.25.A Appendix A of the LMI identifies eight types of supportability analysis summaries in broad, general terms, and worksheet 1 can be used to identify the content of the summaries. Together with DID DI-ALSS-81530, the worksheets will be identified in and attached to the program's SOW for inclusion in the RFP.

13.25.B Appendix B of the LMI identifies definitions, data codes, and field formats of 159 data products to be selected as data deliverables using worksheet 2. Together with DID DI-ALSS-81529, the worksheet will be identified in and attached to the program's SOW for inclusion in the RFP.

13.26 For additional information, follow the link to Logistics Tools, then LMI on the following website: <http://logistics.navair.navy.mil> or to the KMS website <https://kms.navair.navy.mil/kms/index.cfm> Also for additional related information refer to the "NAVAIR Logistics Handbook" located on the NAVAIR Knowledge Management System (KMS) website at the Logistics Guidance tab.

13.27 POC: Norman Way. AIR-6.9.2.3, (301) 757-8256

## CHAPTER XIII: ACQUISITION LOGISTICS SUPPORT

### PART F: INITIAL OPERATIONAL CAPABILITY SUPPORTABILITY REVIEW (IOCSR)

#### 13.28 Purpose

13.28.A The purpose of the Initial Operational Capability Supportability Review (IOCSR) is to positively impact supportability programs through augmented management attention, realignment of funds, or other available means, and to communicate the Integrated Logistics Support (ILS) posture of systems & equipment to our fleet customers. The IOCSR process will provide quality and timely information to decision authorities regarding ILS support. The IOCSR replaces the Independent Logistics Assessment (ILA) at IOC, and will be the basis for certifying at IOC the adequacy of logistics support to the Milestone Decision Authority (MDA) for all ACAT I-IV programs.

13.28.B The IOCSR is a self-assessment, performed by the program logisticians with stoplight criteria agreed upon by the Fleet customer. Each program is required to brief their assessment at a formal Pre-Board, chaired by AIR-6.0, or a Flag Board, chaired by AIR-00.

13.28.C The IOCSR process consists of five major phases. They are explained fully in NAVAIRINST 4081.3. A brief summary of the phases is provided below. All pertinent documentation is located on the OCSR website located at <https://prdwebserv4.navair.navy.mil/ocsr>. This is a secure site and registration is required. Site registration is located at <http://logistics.navair.navy.mil/ocsr>.

13.29 Source Document: NAVAIRINST 4081.3

#### 13.30 Responsibility

13.30.A Phase I – Identification of Programs to be Assessed. AIR-6.9.2.3 utilizes the AIR-1.1 ACAT Tracking System database to identify all ACAT I-IV program IOC dates. Programs within 24 months of their scheduled IOC dates will be contacted by the IOCSR Process Manager to confirm those dates and will be placed on the IOCSR CY schedule. The schedule is posted on the website and all Pre-Board and Board members are notified. Program personnel are also contacted at this time and encouraged to request training provided by the IOCSR Process Manager.

13.30.B Phase II – The Self-Assessment. Every Program Manager (PM) and Assistant Program Manager for Logistics (APML) will jointly conduct an IOC self-assessment, using the standard template provided on the IOCSR website. The PM/APML, during the course of the self-assessment, must obtain written user agreement to all workarounds. The name, code, and phone number of the user representative providing concurrence must be identified on a Workarounds & Fleet Concurrence slide. The self-assessment results will be recorded on the IOCSR self-assessment-briefing guide and be made available on the OCSR Website. The PM/APML will ensure a self-assessment is maintained in a current status and available on the website from within 24 months prior to IOC until the program is at IOC. Additionally, the program will ensure an accurate assessment is available at least one month prior to the IOCSR Pre-Board or Flag Board meetings.

13.30.C Phase III – The Pre-IOCSR Board.

Based upon their review of the self-assessments, the IOCSR Pre-Board is responsible for:

- Recommending which programs are briefed to the IOCSR Board
- Resolving support issues
- Recommending actions to be taken by the IOCSR Board (such as delay of IOC/fleet introduction, addition of funding, etc.)

- Recommending any special actions or conditions

13.30.D The IOCSR Pre-Board is at the O-6/O-7 level and is represented by NAVAIR 1.0/4.0/6.0, CNO N432/781, HQMC, CNAF N43, TYCOM N41/42, the cognizant PEO (A/T/W/JSF), NAVICP, NAVSUP, CNATRA, and COMNAVRESFOR.

13.30.E IOCSR Pre-Board Schedule: The IOCSR Pre-Board meets each month, as required or depending on the number of programs on the CY schedule.

13.30.F Phase IV – The IOCSR Board. Based upon their review of the self-assessments and the Pre-Board's recommendation, the IOCSR Flag Board is responsible for:

- Recommending actions to be taken by the PM or Sponsor (such as delay of IOC/fleet Introduction, addition of funding, etc.), and
- Recommending any special actions or conditions.

13.30.G The IOCSR Flag Board is at the O-7 to O-9 level and is represented by NAVAIR 00/1.0/4.0/6.0, CNO N43/78, HQMC, CNAF N4, TYCOM N00, the cognizant PEO (A/T/W/JSF), NAVICP, NAVSUP, CNATRA, and COMNAVRESFOR.

13.30.H The IOCSR Flag Board schedule: The IOCSR Flag Board meets as required.

13.30.I Phase V – Certification. Certification is achieved when the fleet customer agrees that all elements are GREEN for IOC. In some cases a program may be certified with YELLOW elements, however, that program may be monitored and required to submit an updated assessment.

Certification status is recorded on the OCSR website.

13.31 POC: Mary Bate, AIR-6.9.3.2, (301) 757-8317

## CHAPTER XIII: ACQUISITION LOGISTICS SUPPORT

### PART G: WARRANTIES

13.32 Purpose. To describe the warranty development process.

13.33 Discussion

13.33.A The Defense Acquisition Guidebook, 8 Oct 2004, contains the following paragraph (2.3.16.3.10) for warranties: The PM should examine the value of warranties on major systems and pursue them when appropriate and cost-effective. If appropriate, the PM should incorporate warranty requirements into major systems contracts in accordance with FAR Subpart 46.7.

13.33.B A program's Acquisition Plan should state the intent to use a warranty.

13.33.C The Program Manager is responsible for warranty development and assessment, and shall take all actions necessary to ensure that the warranty is effective and properly administered.

13.33.D A plan for warranty development shall be a discussion item during the Procurement Planning Conference meeting (see Chapter IX, Part B of this Guide).

13.33.E The Program Manager should take the following steps to develop the warranty:

- ◆ Task the PCO to develop contractual language to implement the warranty.
- ◆ Task the APM/LM to: (a) provide inputs to the warranty based on the maintenance concept and future initial/replenishment spare procurements, ensuring that the maintenance plan and the warranty are compatible, (b) coordinate with the spares procuring agency (e.g., Naval Inventory Control Point) to assure that the warranty and future spares warranties are compatible, and (c) develop a warranty implementation plan.
- ◆ Coordinate with the Administrative Contracting Officer (ACO) and document their role in administering the warranty.

13.34 POC: Steve Behrens, AIR-6.9.3, (301) 757-8233.

## CHAPTER XIV: ENGINEERING DISCIPLINES

### PART A: HUMAN SYSTEMS INTEGRATION PROCESS

14.1 Purpose. To influence system design and associated support requirements so that developmental, non-developmental, and product-improved systems can be operated and maintained in the most cost-effective and safe manner consistent with manpower structure, personnel aptitude and skill, and training resource constraints.

#### 14.2 Source Documents:

DoDD 5000.1  
DoDI 5000.2  
SECNAVINST 5000.2D

14.3 Discussion. According to current DOD policy (DODI 5000.2, Enclosure 7), the PM shall have a comprehensive Human Systems Integration (HSI) plan in place early in the acquisition process to optimize total system performance, minimize total ownership costs, and ensure the system accommodates the characteristics of personnel that will operate, maintain, and support the system. The HSI approach must include the following disciplines, as applicable: human factors engineering, personnel, habitability, manpower, training, safety and occupational health, and personnel survivability. Program support (technical personnel, processes, tools) for these disciplines is provided by various NAVAIR engineering and logistics competencies. Nested within the overarching systems engineering process, HSI focuses on the integration of these disciplines among themselves and into design and support concepts. Beginning at program inception, the HSI effort helps develop system-specific and measurable HSI constraints (manpower, personnel, training, human performance, health hazards, and environment requirements). HSI disciplines are then actively employed throughout the acquisition process to ensure a product is delivered that is operable and supportable within those constraints. Further guidance and HSI Process documentation is available from the NAVAIR HSI POC.

14.4 Does HSI work? The U.S. Army undertook an extensive cost-benefit analysis of HSI as applied to their Comanche Aircraft Program. They reported an estimated 3.3 billion dollar cost avoidance due to HSI efforts.

#### 14.5 Lessons Learned

a) Too Little Too Late. Many programs do not consider HSI until a milestone review is imminent and the question of HSI documentation is at hand. DOD policy requires the HSI approach to be summarized in the program's acquisition strategy. HSI approach and documentation should be commensurate with the nature and requirements of the program. Contact the NAVAIR HSI Coordinator as early as possible in a program's life cycle to obtain the latest guidance and support.

b) Team Effort. HSI is consistent with current team concepts. Program- or IPT-level HSI working groups are important integration mechanisms to be considered. Stove-piping IPTs should be avoided.

c) I'm Human, I Can Do HSI. The disciplines of HSI are legitimate, scientifically-based technical disciplines with supporting theories, empirical data, analytical techniques, methodologies, and professional guidelines that take advanced academic degrees and many years of experience to master. Although fleet user representation on design teams is desirable (and often necessary), it cannot replace experienced, proficient professionals.

14.6 POC: Ron Crescini, AIR-4.6.5, (301) 342-8177

## CHAPTER XIV: ENGINEERING DISCIPLINES

### PART B: SYSTEMS ENGINEERING

14.7 Purpose. Systems Engineering (SE) is a key ingredient of successful Program Management. Although SE is an engineering technical discipline unto itself, it must be viewed as a set of tasks for the Integrated Program Team (IPT)/Fleet Support Team (FST) to apply and implement, rather than just “the (Chief) Systems Engineer’s job”.

#### 14.8 Source Documents:

NAVAIRINST 4355.19C, Systems Engineering Technical Review Process (10 APR 2006)

MIL-STD-499A, Systems Engineering, 1 May 1974 (now cancelled)

MIL-STD-499B, Systems Engineering, 1994 (never released)

EIA Standard 632, Systems Engineering, Jan 1999

NAVAIR Systems Engineering Guide – The NAVAIR Systems Engineering Process Working Group added NAVAIR relevant information to EIA-632 (Annexes beyond “G” were added by NAVAIR)

NAVAIR uses the Software Engineering Institute (SEI) Capability Maturity Model for software integration

NAVAIR Systems Engineering Resource Center <https://serc.navair.navy.mil/>

#### 14.9 Definitions

System - A system is an integrated composite of people, products, and processes that provide a capability to satisfy a stated need or objective.

Systems Engineering - Systems Engineering (SE) is the effective application of scientific and engineering efforts to transform an operational need into a defined system configuration through the top-down iterative process of requirements definition, functional analysis and allocation, synthesis, optimization, design, test, and evaluation. Other descriptors include:

- Top-down approach viewing the system as a whole
- A life-cycle orientation -- from S&T through RDT&E and Production, to In-Service / Stable Operations, including Disposition/Disposal
- A total integrated effort with emphasis on “front-end” analysis
- An interdisciplinary effort (“team” approach)

#### 14.10 Discussion

14.10.A The systems engineering process (shown below) is the heart of systems engineering management. Within NAVAIR, the Assistant Program Manager coordinates SE for Systems and Engineering (APMSE – “Class Desk” or “Chief Engineer” for a PMA). Systems Engineering provides a structured but flexible process that transforms operational requirements into specifications, architectures, and configuration baselines. The discipline of this process provides the control and traceability to develop solutions that meet Fleet needs. SE controls and manages the system design effort via the Risk Management Processes (see Chapter XIV, Part F), and is the major connection between the technical management efforts and the overall acquisition effort. It controls the design effort by developing design baselines that govern each level of development. Systems engineering is a continuous process that spans all phases of the systems’ life-cycles.

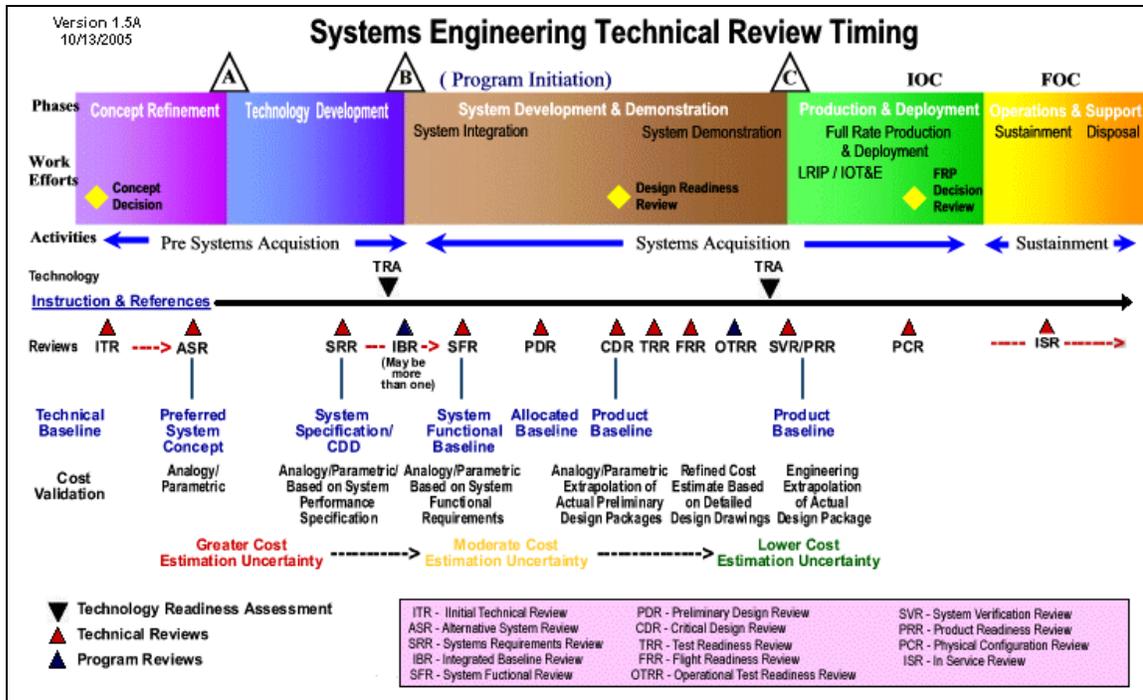


Diagram of the Typical Systems Engineering Technical Reviews

14.10.B NAVAIRINST 4355.19C establishes the policy, outlines the process, and assigns responsibilities for the conduct of up to 12 different Systems Engineering Technical Reviews (SETRs) on NAVAIR programs. It also requires programs to have a Systems Engineering Plan (SEP -- see <https://acc.dau.mil/CommunityBrowser.aspx?id=17799> for detailed guidance), which defines the overall plan for the program's SETRs, and the systems engineering processes to be employed by the program. Additional information concerning implementation of this instruction and procedures for compliance are provided separately in the supplemental SETR Process Handbook which contains stand alone technical review modules and a Risk Assessment checklist for each of the reviews. These documents are living documents, intended to be updated based on user experiences, and are accessible via the NAVAIR Systems Engineering Resource Center (SERC) website at <https://serc.navair.navy.mil/>.

14.10.C Life-cycle integration is necessary to ensure that the design solution is viable throughout the life of the system. It includes the planning associated with product and process development, as well as the integration of multiple functional concerns into the design and engineering process. In this manner product cycle-times can be reduced, and the need for redesign and rework substantially reduced.

14.10.D In summary, systems engineering is an inter-disciplinary engineering management process that evolves and verifies an integrated, life-cycle balanced set of system solutions that satisfy customer needs. The key to program success is to have an effective SE process in place, and to utilize the process during execution of the program.

14.11 POC: Jaime Guerrero, APEO (RDT&E) AIR-1.0, (301) 757-6640

## CHAPTER XIV: ENGINEERING DISCIPLINES

### PART C: INTEGRATED BASELINE REVIEWS

14.12 Purpose. The purpose of the Integrated Baseline Review (IBR) is to achieve joint PM's understanding of the risks inherent in the planning and management control processes that will operate during a program's execution.

14.13 Source Documents: Defense Acquisition Guidebook (specifically section paragraphs 11.3.4, 4.3.2.4.2, and 4.3.4.4.1), SECNAVINST 5000.2D (Table E3T2), and NAVAIRINST 4355.19B (subj: Systems Engineering Technical Review Process)

14.14 Discussion. Effective program cost and schedule management depends upon establishment of reliable contractor and organic (in-house) cost, schedule, and technical baselines. By the above references, program managers and their technical staffs of Integrated Program (or Product) Teams (IPTs) are required to review contractor or organic planning baselines either prior to or within six months after contract award (depending on the FAR clause used in the solicitation and/or contract). The process should be employed throughout the life of the project to maintain continuing joint PM's understanding. This review is required for contracts requiring compliance with the Earned Value Management System (EVMS) Guidelines. The objectives of the IBR are as follows:

- a. Confirm that the Performance Management Baseline (PMB) captures the entire technical scope of authorized work.
- b. The authorized work is logically scheduled to meet the program objectives and risks to meeting planned Milestones are understood.
- c. The PMB risks (budget, technical, resources, schedule, management processes) are identified and quantified.
- d. The proper amount and mix of resources have been assigned to accomplish all requirements.
- e. The management control processes are implemented.
- f. Tasks are planned and can be measured objectively relative to the technical progress.

#### 14.15 Responsibilities

14.15.A The program managers, as leaders of the IPTs, are responsible for planning and executing the IBR (e.g., providing an adequate number of qualified technical personnel to serve as the principal IBR team members, supplemented by applicable support skills; documenting in the risk management plan risks identified during the IBR, and reviewing progress on the actions until issues are resolved).

14.15.B The Assistant Commander for Research and Engineering (AIR-4.0) is responsible for the development/maintenance of IBR guidelines and processes. Assistant Program Managers for Systems Engineering will lead the technical assessment during IBRs (assisted by assigned Assistant Program Managers for Logistics, NAVAIR Headquarters and field activity personnel, and contract administration offices) as directed by the PMA.

14.15.C A Management System Assessment (MSA) will be conducted by AIR-4.2.3 prior to the on-site IBR to assist in identifying any management process risk(s). A Management System Assessment (MSA) is an element of the Integrated Baseline Review (IBR) and is conducted to determine whether the contractor/government activity has properly implemented their previously accepted EVM system to the new contract (Note: In situations where a contractor/government activity does not have an accepted system, the team shall assess the system applied to the contract for compliance with the 32 Guidelines). The MSA is typically performed once the Performance Measurement Baseline (PMB) is established and prior to the on-site IBR usually within 60 calendar days after contract award. The contractor's performance measurement system is assessed against the 32 guidelines in the American National Standards Institute/Electronic Industries Alliance 748, *Earned Value Management Systems* (ANSI/EIA-748) and the results are used to rate the IBR Management Processes Risk.

14.15.D In addition to the MSA, a Schedule Risk Assessments (SRA) will be conducted prior to the on-site IBR as an integral part of the IBR process to identify and quantify milestone/event and task/activity level schedule risk. The SRA is conducted by AIR-4.2.3 with assistance from the various IPT competencies. The SRA is typically

performed on the Program Critical Path and the Critical Path and Near Critical Paths to selected critical milestones. A schedule risk assessment predicts the probability of project completion by contractual dates. Three-point estimates are developed for remaining durations of remaining tasks/activities that meet any of the following criteria: (1) critical path tasks/activities, (2) near-critical path tasks/activities (as specified in the CDRL), (3) high risk tasks/activities in the program's risk management plan. These estimates include the most likely, best case, and worst case durations which are then used to perform a probability analysis of key contract completion dates.

14.15.E Procuring Contracting Officers will ensure that contractors are informed, in appropriate Request for Proposal (RFP) language, of the Government's intent to conduct either pre-award or post-award IBRs . (Contractual authority for conducting IBRs may be found in the data access provision of the EVMS Clause 252.234-7001.) In drafting the RFP, IPTs should consider requiring submission of an appropriate level of baseline information as part of the contractor's proposal. This information may then be used in the evaluation of proposals during source selection if a pre-award IBR is not required. Contractor proposals should be prepared and evaluated in full awareness of planned IBR requirements, and IBR schedules promulgated so that the contractor can properly prepare for such reviews.

14.15.F Upon completion, the results of the IBR need to be mutually understood and documented in the risk management processes. The Government and Contractor PMs should agree on a plan of action and who is responsible for the action for each risk item identified.

14.15.G With proper planning and preparation, IBRs can provide a means for PMAs to manage program performance through a better understanding of the PMB and the contractor's management control processes.

14.16 POC: Chris Mushrush, AIR-4.2.3, (301) 342-2396

## CHAPTER XIV: ENGINEERING DISCIPLINES

### PART D: MANUFACTURING ENGINEERING

14.17 Purpose. This section addresses the implementation of manufacturing engineering (ME) in the acquisition process. ME includes design producibility, manufacturing planning, and quality assurance/engineering.

#### 14.18 Discussion

14.18.A AIR-4.1.9 personnel provide ME support and expertise to their assigned Integrated Program (Product) Teams (IPTs). ME requirements will be tailored from FAR sections 46 and 52, DoD Series 5000.1/2, NAVSO P-4245.7-M, and extensive lessons-learned. ME requirements will typically be placed in the performance specifications, Statement of Work (SOW), equipment specifications, and contract data requirements list. Acquisition plans will reflect consistency with the contract and Navy policy embodied in SECNAVINST 5000.2D. NAVAIRINST 4355.19B (subj: Systems Engineering Technical Review Process; dated 25 Jun 2003) addresses the technical reviews conducted on each program, and provides a Production Readiness Review risk assessment checklist. Additional information concerning implementation of this instruction, and procedures for compliance, are provided separately in the supplemental SETR Process Handbook, which contains stand-alone technical review modules and a Risk Assessment checklist for each of the reviews. These documents are living documents, intended to be updated based on user experiences, and are accessible in the NAVAIR Microsoft Outlook Public Folders, under AIR-4.1.G and on the NMCI network at <http://www.navair.navy.mil/kms/41g/>, under “National Management Implementation”.

14.18.B AIR-4.1.9 support should be enlisted for all program phases, well before contract award, in order to influence acquisition planning and to ensure that manufacturing, producibility, and quality are appropriately considered in RFPs. AIR-4.1.9 personnel should participate in source selections and pre/post-award surveys. The ME competency's basic functions are to assess the design, manufacturing processes, and tooling; to mitigate production transition risk through evaluating design and manufacturing alternatives in light of program affordability, manufacturing efficiency, and quality objectives; and to identify and resolve production and quality problems experienced in the field or manufacturing facility.

14.18.C AIR-4.1.9 personnel identify, assess, and seek the mitigation of manufacturing, producibility, and quality risks beginning early in development and continuing through production. This role is accomplished through participating in design reviews and program meetings; by reviewing contractor quality, producibility, and manufacturing plans, reports, and internal documents; by reviewing draft drawings; by leading ME-oriented reviews; and by liaison with the on-site Defense Contract Management Agency (DCMA) representatives. ME competency areas include:

- ◆ Design Producibility, including integrated product and process development, design for manufacturing/assembly, key characteristic definition and control, geometric dimensioning and tolerancing, process development, validation and verification, gage and tooling development, and design-to-cost efforts.
- ◆ Manufacturing Management, including the development and implementation of production scheduling/control and work measurement systems, work instructions, and lean/agile systems.
- ◆ Quality, including the development and implementation of the quality system, process control, variability reduction, foreign material exclusion, workmanship, and nonconformance prevention.

14.19 POC: Dale Easley, AIR-4.1.9, (301) 342-8327

## CHAPTER XIV: ENGINEERING DISCIPLINES

### PART E: SYSTEMS ENGINEERING TECHNICAL REVIEWS

14.20 Purpose. Systems Engineering Technical Reviews (SETRs) ensure competency insight of the technical aspects of every NAVAIR program. They are a key tool in managing technical progress and communications, and provide an important function in acquisition program management.

#### 14.21 Source Documents:

NAVAIRINST 4355.19C, Systems Engineering Technical Review Process, 10 APR 2006

NAVAIR Systems Engineering Resource Center (SERC) -- <https://serc.navair.navy.mil/>

SETR Risk Assessment Checklists (available via SERC website)

MIL-STD-1521, System Design Review

NAVAIRINST 13034.1B, Flight Clearance Policy for Manned Air Vehicles, 24 Oct 2000

NAVAIRINST 13034.2, Flight Clearances for Unmanned Aviation Systems, 15 Aug 2001

NAVAIR Systems Engineering Guide

Tools are available to assist in the development and management of requirements (e.g., Data Object Oriented Repository System (DOORS)) via the NAVAIR Systems Engineering Resource Center

NAVAIR AIR-4.0P Airworthiness Website -- <https://airworthiness.navair.navy.mil/>

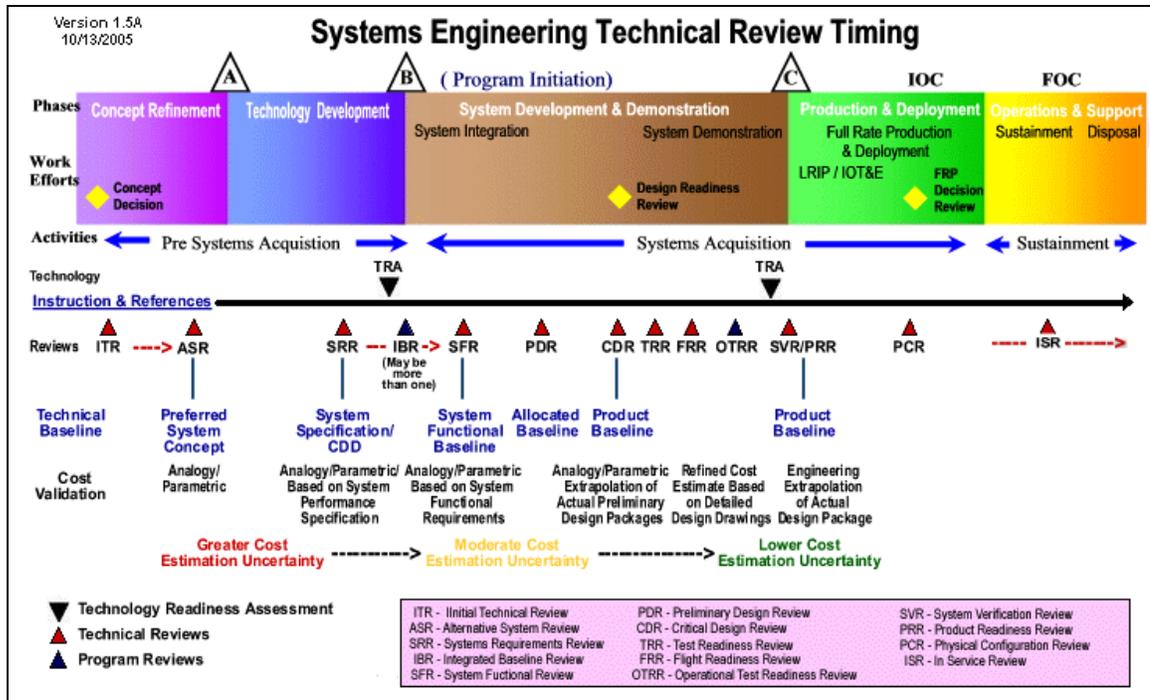
Defense Acquisition University (DAU) -- <http://www.dau.mil/>

Note: Additional SE Tools are available to assist in the development and management of requirements (e.g., Data Object Oriented Repository System (DOORS)) via the NAVAIR Systems Engineering Resource Center

#### 14.22 Discussion

14.22.A NAVAIRINST 4355.19C establishes the policy, outlines the process, and assigns responsibilities for the conduct of Systems Engineering Technical Reviews (SETRs -- see figure below) on NAVAIR programs. It also requires programs to have a Systems Engineering Master Plan (SEP), which defines the overall plan for a program's SETRs, and the systems engineering processes to be employed by the program. From a technical perspective, there are five critical processes that merit thorough planning to properly manage program risk and ensure program success. These program pillars are:

- a) the Systems Engineering Management Plan (SEP) -- see the SERC website or <https://acc.dau.mil/CommunityBrowser.aspx?id=17799> for detailed guidance;
- b) the Acquisition Logistics Support Plan (ALSP);
- c) the Test and Evaluation Master Plan (TEMP)
- d) an Independent Cost Estimate (ICE); and if appropriate.
- e) the Airworthiness Certification Process -- see the NAVAIR Airworthiness website for detailed processes and guidance <https://airworthiness.navair.navy.mil/>



Systems Engineering Technical Reviews -- Shown in Chronological Order

14.22.B Additional information concerning implementation of NAVAIRINST 4355.19C and procedures for compliance are provided separately in the supplemental SETR Process Handbook, which contains stand alone technical review modules and a Risk Assessment checklist for each type of review. These documents are living documents, intended to be updated based on user experiences, and are accessible via the NAVAIR Systems Engineering Resource Center (SERC) website at <https://serc.navair.navy.mil/>.

14.22.C As a part of the overall systems engineering process, technical reviews enable an integrated assessment of the system's design progress against plans and key knowledge points in the development process. Engineering rigor, interdisciplinary communications, and competency insight are applied to the maturing design in the assessment of requirement traceability, product metrics, and decision rationale. Technical reviews are an integral part of the systems engineering process and consistent with existing and emerging commercial standards. NAVAIR conducts technical reviews on Program Executive Officer (PEO) and NAVAIR managed acquisition programs (Acquisition CATEGORIES ACAT-I through -IV). Technical reviews may also be applied to Abbreviated Acquisition Programs (AAPs) as determined by the cognizant PEO and program manager. Program plans and contracts should provide for the conduct of technical reviews as part of the acquisition process. An objective of these reviews is to provide the program manager with an executive-level engineering assessment.

14.22.D Program managers shall ensure that the results of each technical review (overall technical/risk assessment and resolved action items) are addressed by the program team and are integrated into the management assessment of program technical, cost, and schedule risk. Any attempt to tailor acquisition activities by deleting Technical Reviews should be guided toward reducing the scope of individual reviews, vice deleting them.

14.23 POC: Jaime Guerrero APEO (RDT&E) AIR-1.0, (301) 757-6640

## CHAPTER XIV: ENGINEERING DISCIPLINES

### PART F: RISK MANAGEMENT

14.24 Purpose. To establish a standardized Program/Project Risk Management process across Naval Air Systems Command (NAVAIR) programs.

#### 14.26 Definitions

**Risk** is the potential for variation in cost, schedule, or performance or its products. While such variation can include positive opportunities, risk is more generally considered to be the potential for a negative future reality.

**Risk Management** (RM) is an organized method for continuously identifying and measuring risk; developing mitigation options; and selecting, planning, and implementing the appropriate risk mitigations. Risk management is a process that evaluates the likelihood, or probability, of an undesirable event occurring; assesses the consequences, or severity, of the event should it occur; evaluates the sources or root causes of the risk; and identifies the available risk mitigations. Effective risk management depends on early identification and analyses of risk; risk management planning; early implementation of corrective actions; continuous tracking and reassessment; and communication, documentation, and coordination.

**Issues Versus Risks: Risk Assessments are not to be confused with program performance assessments. If a risk is described in past tense the likelihood of occurrence is 100 percent; it has happened, and it is an issue. The important difference between an issue and a risk is that issue management is focused toward mitigating current effects/impacts, while risk management seeks to preclude/mitigate future effects and address root causes. An issue and a risk are not necessarily independent or easily distinguished; the review of an issue might reveal a continuing risk from the unresolved root cause of the issues. Note that risk management is inherently much more powerful of a tool than issue management, just as preventing a train-wreck is far better than cleaning-up the wreckage after-the-fact.**

#### 14.26 Source Documents:

DoD Directive 5000.1 of 12 May 03

DoD Instruction 5000.2 of 12 May 03

Risk Management Guide For DoD Acquisition (Sixth Edition/Version 1.0 Of August, 2006)

NAVAIRINST 5000.21, Program/Project Risk Management, of 25 Jun 03

NAVAIR Risk Management Handbook

DSMC Risk Management Guide for DoD Acquisition

Multiple commercial and DoD publications are available

NAVAIRINST 4355.19C, Systems Engineering Technical Review Process, 25 Jun 03

SETR Risk Assessment Checklists

#### 14.27 Discussion

14.27.A Risk Management is basically comprised of four process elements:

Risk Identification – What can go wrong?

Risk Analysis -- How big is the risk?

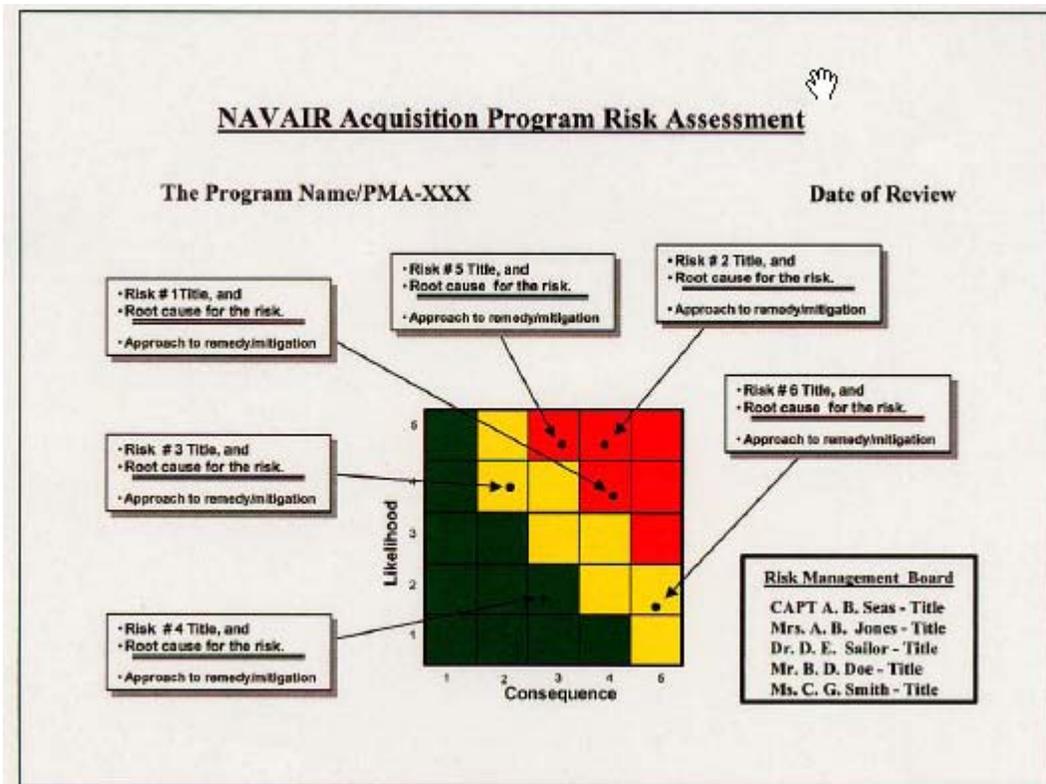
Risk Mitigation Planning – How can the risk be reduced?

Mitigation Plan Implementation – a PM function that addresses how the mitigation plan can be implemented?

14.27.B The source documents require PMs to establish, maintain, and utilize an integrated risk management process. A formal Risk Management Board (RMB) and a Risk Management Plan (RMP) are required components of the risk management process.

14.27.C NAVAIR risk reporting shall present standard likelihood and consequence screening criteria, as well as the standard risk matrix (see figure below). The plotted position in the standard matrix should show the PM's current assessment of the risk's probability of occurrence, and the estimated severity of its effect on the program if mitigation fails. As risk mitigation succeeds in a program, a *yellow* or *red* risk position on the risk matrix will migrate in successive assessments from its current location toward the green. Each risk description should include three key elements:

- a) a brief description of the risk,
- b) a brief description of the root causal factor(s) for the risk, and
- c) the proposed/planned mitigations that address the risk source(s) and effect(s).



Sample Program Risk Assessment -- from NAVAIR Risk Mgmt Guide

14.27.D The NAVAIR Risk Management Handbook and other resources listed above are a supplemental publications that provide guidance and procedures for conducting program risk assessments. These documents are accessible via the NAVAIR Systems Engineering Resource Center (SERC) website at <https://serc.navair.navy.mil/>. The August 2006 DoD Risk Guide is an especially excellent document and will most-likely be driving updates to NAVAIR's RM directives in the near future. Additionally, tailorable checklists for each Systems Engineering Technical Review (SETR) are available via this site.

14.28 POC: Jaime Guerrero, APEO(RDT&E) AIR-1.0, (301) 757-6640

## CHAPTER XIV: ENGINEERING DISCIPLINES

### PART G: SOFTWARE INTENSIVE SYSTEM (SIS) ACQUISITION AND PROGRAM MANAGEMENT

14.29 Purpose. To provide NAVAIR policies and guidance on software intensive system (SIS) acquisition and program management. Program compliance with these policies meets the intent of the Defense Authorization Act of FY03, Section 804, and the requirements of ASN(RDA) memo dated 15 May 2006.

#### 14.30 Source Documents:

Defense Acquisition Guidebook

NAVAIRINST 5234.1, Policy on Software Evaluations for Naval Air Systems Command Programs

NAVAIRINST 5234.2, Requirements for Process Improvement Actions for Naval Air Systems Command Software Acquisition, Development, and Life-Cycle Support

NAVAIRINST 5234.3, Naval Air Systems Command Software Systems Leadership Operations and Organization

NAVAIRINST 5234.4, Naval Air Systems Command Independent Expert Program Reviews (IEPR) for Software Intensive Programs

NAVAIRINST 5234.5A, Naval Air Systems Command Metrics for Software Intensive Programs Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (OUSD AT&L) Report of Nov 2000; Report of the Defense Science Board Task Force on Defense Software

NAVAIRINST 4355.19C, Systems Engineering Technical Review Process and Associated Risk Assessment Checklists

Section 804 of PL 107-314 (National Defense Authorization Act for Fiscal Year 2003), Improvement of Software Acquisition Processes

OSD Memorandum of 21 March, 2003, Software Acquisition Process Improvement Programs

ASN(RDA) memorandum dated 15 May 2006; Software Process Improvement Initiative

Attachment: Guidance for preparation of Sections L and M of NAVAIR solicitations regarding offeror software development process maturity.

#### 14.31 Discussion

14.31.A The complexity of our weapons systems has grown significantly over the last few years. Concurrent with this growth in complexity is that weapon system functionality (both new capability and upgrades) is being implemented in software (and firmware). Today, it is hard to imagine any significant weapon system new development or upgrade not being a software intensive effort.

14.31.B The DoD programs reviewed by the Defense Science Board Task Force exhibited fundamental problems that were readily identifiable. Too often, programs lacked well thought-out, disciplined program management and/or software development processes. Meaningful cost, schedule, and requirements baselines were lacking, making it virtually impossible to track progress against them. In addition, there were numerous examples where the acquisition and/or contractor team lacked adequate software skills to execute the program. In one case, a program requiring more than 2 million lines of real-time embedded code was awarded to a contractor who had no meaningful software development experience. In general, the technical issues, although difficult at times, were not the determining factor, lack of disciplined execution was.

14.31.C To address these concerns, Congress passed the Defense Authorization Act of FY03, Section 804. This Act requires a program to improve software acquisition processes to include, at a minimum, the following:

- a) A documented process for software acquisition planning, requirements development and management, project management and oversight, and risk management;
- b) Efforts to develop appropriate metrics for performance measurement and continual process improvement;
- c) A process to ensure that key program personnel have an appropriate level of experience or training in software acquisition; and
- d) A process to ensure that each military department and Defense Agency implements and adheres to established processes and requirements relating to the acquisition of software.

14.31.D Toward this end, NAVAIR under the leadership of the System Leadership Council (SLC) (NAVAIR INST 5234.3, Section 804(b)(3)) has developed and implemented the following policies and guidelines for improving SIS acquisition and program performance.

#### 14.32 NAVAIR Policies and Guidelines

- **Contract award for the acquisition of ACAT I, II, III, and IV Software Intensive Systems will only be made to contractors and subcontractors who have demonstrated successful software development capabilities equivalent to the Software Engineering Institute (SEI) Software Capability Maturity Model (SEI SW-CMM), Capability Maturity Model Integration (CMMI), or equivalent, at process maturity Level 3. Should this requirement not be met a risk mitigation plan must be submitted with the proposal to describe planned actions to substantially lower program risk. Attachment (1) provides guidance in the preparation of sections L and M of NAVAIR solicitations. (NAVAIRINST 5234.1)**

14.32.A The Defense Science Board Task Force recommended that software programs only contract with those who have demonstrated SEI Software Capability Maturity Model (SEI SW-CMM), Capability Maturity Model Integration (CMMI), Level 3 process maturity. Process certification or recertification should be no more than 24 months old. NAVAIR has extended this requirement to all software intensive programs, regardless of their ACAT classification.

- **Programs shall develop and execute a Plan of Actions and Milestones (POA&M) to implement, sustain, and measure continued process improvement in software systems acquisition, development, and life-cycle support. Minimum POA&M requirements shall include assessing baseline performance and capability. (NAVAIRINST 5234.2)**

14.32.B The focus of this requirement is on utilization of the SEI Capability Maturity Model Integration (CMMI), and Personal Software Process/Team Software Process (PSP/TSP) as the basis for performance improvements. This requirement aligns with the Defense Science Task Force finding that the primary cause of poor program performance is lack of “disciplined execution”.

Additional Defense Science Board Software Task Force recommendations include:

- a) Improve software skills of acquisition and program management,
  - b) Collect, disseminate, and employ best practices,
  - c) Restructure contract incentives, and
  - d) Strengthen and stabilize the technology base.
- **Program plans for the acquisition of ACAT I, II, and III Software Intensive Systems will proactively include Independent Expert Program Reviews (IEPRs) at key program milestones or at recurring intervals to help program managers address issues of cost, schedule, technology, risk, and process, and provide an opportunity to share scarce expert resources. (NAVAIRINST 5234.4)**

14.32.C The Defense Acquisition Guidebook states that the program manager for an ACAT ID or IC program that requires software development to achieve the needed capability should convene an IEPR after Milestone B and prior to the system Critical Design Review, and that IEPRs shall also be considered for ACAT IA, II, and III programs. These reviews are intended to help the program team ensure that disciplined processes and methodologies are in place. The review team should consist of subject matter experts (SMEs) who have program and software management skills, technical skills appropriate to the program, and requisite domain knowledge.

- **Programs acquiring software intensive systems shall establish and utilize software measures and metrics that are tailored to the program needs in order to manage the software efforts. These measures and metrics shall, as a minimum, provide visibility into financial performance, schedule performance, and product quality. They shall be collected and analyzed monthly throughout the life-cycle of the program. (NAVAIRINST 5234.5A)**

14.32.D Measurement serves as the basis for performance management and process improvement as it objectively assesses project progress toward achieving predetermined goals and objectives. The focus of NAVAIRINST 5234.5A is to promulgate a minimum set of software measures to enable programs to make sound engineering decisions throughout the program lifecycle. These measures include: requirements, size of effort, staffing, quality, maturity, capacity, schedule, cost, and time.

14.33 For more information contact the NAVAIR Software/Systems Support Center at (760) 939-6226, or (301) 342-2103. Software engineering and acquisition information is also available on the Software Engineering Division website at <https://home.navair.navy.mil/src/>.

PART I continues on the next page with the attachment providing guidance for preparation of Sections L & M in NAVAIR solicitations regarding offeror software development process maturity.

14.34 Sections L & M in Request for Proposals (RFP)

## **5252.239-9500 – SOFTWARE DEVELOPMENT CAPABILITIES AND PROCESSES (2001) (NAVAIR)**

USE: Use in Section L of solicitations requiring software development or upgrade(s) when the item being procured is considered to be a Software Intensive System (SIS). SIS is defined as any system where a significant portion or component of the functionality is implemented in software or where software presents the primary technical or programmatic challenge to the system developer. The following is an example of proposal instruction (Section L) language that may be used to meet DOD and NAVAIR policy on software evaluations. Similar words are acceptable as long as adequate information is requested to assess the software engineering capability level that the offeror has achieved and to assess risk mitigation plans if they have not yet achieved Software Engineering Institute (SEI), Capability Maturity Model Integration (CMMI), Level 3 process maturity. Past Performance information requested need not specifically identify software development since assessment of past performance regarding software or any other discipline for that matter is inherent in the past performance evaluation. Also the intent of the information requested under Technical/Management is that it be adequate enough to assess the offeror's SEI CMMI Level or equivalent without additional past performance information.

## **SOFTWARE DEVELOPMENT CAPABILITIES AND PROCESSES**

For Technical or Management:

The following information shall be provided by the offeror, team members, and subcontractors at the business unit(s) engaged in the software development of software intensive systems (SIS). SIS is defined as any system

where a significant portion or component of the functionality is implemented in software or where software presents the primary technical or programmatic challenge to the system.

1. Identify the Software Engineering Institute (SEI) Capability Maturity Model Integration (CMMI) or equivalent level of certification obtained through a Standard CMM Appraisal Method for Process Improvement (SCAMPI) or other SEI-approved assessment method.

2. Demonstrate how this level of certification applies to this solicitation. As a minimum, provide the following information:

a. Identify the agency/company that performed the SCAMPI (Class A, B, or C) and provide a point of contact's name, telephone number, and e-mail address.

b. Identify the date that the certification was obtained.

c. Identify the projects that were evaluated for the level of certification and demonstrate the degree of relevancy that those projects have to the technical requirements of this solicitation. Include a comparability analysis between the projects being performed when the level of certification was made and those of this solicitation.

d. What percentage of the software related personnel for this solicitation was a part of the business unit when it originally achieved its certification level? Demonstrate that these workforce changes did not affect the certification level or if it did, address the risk mitigation actions taken or to be taken to avoid a reduction in the certification level.

e. Describe any significant changes to your software development processes since the capability evaluation was conducted. Show how these process changes did not adversely affect the certification level, or if it did, address the risk mitigation actions taken or to be taken to avoid a reduction in the certification level.

3. If a SEI CMMI Level 3 certification or equivalent was not obtained or cannot be demonstrated, provide a Risk Mitigation Plan to account for the risk(s) associated with a software capability that is less than SEI CMMI Level 3 or equivalent. As a minimum provide the following:

3a. Those process areas that failed to meet or exceed an SEI CMMI Level 3 or equivalent rating.

3b. A schedule and plan that describes how the weaknesses that have prevented an SEI CMMI Level 3 or equivalent certification will be corrected.

For Past Performance:

The offeror shall identify recent relevant programs that provide evidence of its organization's process maturity or capability level. This shall include subcontractors and/or team members involved with the software development effort. Customer points of contact with telephone numbers and e-mail addresses shall be provided.

**5252.239-9501 – SOFTWARE DEVELOPMENT CAPABILITIES AND PROCESSES (FEB 2001)  
(NAVAIR)**

USE: Use in Section M of solicitations requiring software development or upgrade(s) when the item being procured is considered to be a Software Intensive System (SIS). SIS is defined as any system where a significant portion or component of the functionality is implemented in software or where software presents the primary technical or programmatic challenge to the system developer. The following is an example of language that may be included in the evaluation criteria (Section M) language in order to meet DOD and NAVAIR policy on software development. Similar words are acceptable as long as they identify that software development (including risk mitigation plans) will be evaluated.

## **SOFTWARE DEVELOPMENT CAPABILITIES AND PROCESSES**

The risk associated with the offeror's Software Engineering Institute (SEI) Capability Maturity Model Integration (CMMI) level of certification or equivalent and associated risk mitigation plans, if necessary, will be assessed.

## CHAPTER XIV: ENGINEERING DISCIPLINES

### PART H: C5I MODERNIZATION PLAN (C5IMP)

#### 14.35 Purpose

14.35.A This section is intended to help acquisition managers understand the Fleet Commanders' (FLTCOM) process for Ship Alterations (SHIPALT) installations management called the "C5I Modernization Plan" (C5IMP). The applicable "C5I" systems include Command and Control Communications, Intelligence, and ships' Combat Systems, and systems which interoperate or have interfaces with them. The C5I Modernization Plan applies to new, upgraded, and existing NAVAIR systems that are installed in naval ships, and to certain aircraft systems. These installations may be C4I and/or ships' Combat Systems (C5I) hardware and/or software; software which uses ships' computer Local Area Networks (LAN) and communications systems for their transmission; and systems installed in aircraft which have interoperability with ships' Combat Systems. The C5IMP process is managed, among the acquisition community, by Naval Sea Systems Command (NAVSEA 05) as the FLTCOMs' agent.

14.35.B The C5IMP process is the tool for scheduling C5I Ship Alteration (SHIPALT) installations to ensure they are primarily programmed during a ship's Modernization Window. The C5IMP process also involves the assurance and Certification of Interoperability for C5I systems. The process thus involves the joint Systems Commands (SYSCOM), Type Commanders (TYCOM) and Fleet Commanders (FLTCOM) in a mutual process.

14.35.C C5IMP is related to the SHIPMAIN process in that SHIPMAIN provides the authority for a hardware and/or software system to proceed into its installation phase based on both validation of its Operational Requirement, as well as a project's priority with respect to sufficiency of the naval budget (see section on SHIPMAIN regarding "Figure of Merit" (FOM) and budgets).

#### 14.36 Source Documents:

- CINCLANTFLT NORFOLK VA//N00// 061415Z FEB 98 (Battle Group Combat Systems and C4ISR Disconnect)
- CNO WASHINGTON DC//N9// 021648Z MAY 98 (Battle Group Interoperability)
- Memorandum of Agreement between NAVAIR, SPAWAR, and NAVSEA, dtd 12 Aug 99 (Collaboration on Interoperability)
- CINCLANTFLT/CINCPACFLT INSTRUCTION 4720.3A (Management of Afloat Combat and C4I Systems)
- CINCLANTFLT/CINCPACFLT 251912Z MAY 00 (CPF/CLF 4720.3A, Adaptation to Forward Deployed Naval Forces (FDNF))
- CINCLANTFLT/CINCPACFLT 162056Z AUG 00 (IT-21 Shipboard Configuration Management Policy and Procedures)
- CINCPACFLT 092227Z FEB 01 (IT21 Configuration Change Message Format)
- NCTSI INSTRUCTION 9410.1 Series (Procedures for Certification of TADIL and C4I Systems Procedural Interoperability)
- CINCPACFLT/CINCLANTFLT INSTRUCTION 4720.4A (Battle Group Systems Integration Testing Process)
- DCNO(N4) ltr 4000, Ser N4/3S575763 dtd 12 Mar 03
- CNO WASHINGTON DC 111709Z MAY 03 (Fleet Response Plan (FRP))
- COMFLTFORCOM NORFOLK VA 032037Z MAY 04 (C4I and Combat Systems Modernization Process (C5IMP) Policy)
- LANTFLT/PACFLT INST 4790.3 (Joint Fleet Maintenance Manual (Advance Change Notice 02-04) of 8 Dec 04)

### 14.37 Background

14.37.A In the past decade, the Fleet has seen a significant growth in interoperable ships' Combat Systems and C4I systems providing tactical networking capabilities. At the same time, this level of integration of previously-independent combat systems and their parent platforms has led to increased interoperability challenges that need to be addressed prior to actual installation of SHIPALTs and deployment of Strike Forces. As a result, CNO assigned Naval Sea Systems Command (NAVSEA) central responsibility to address Battle Management Command, Control, Communications, Computers, and Intelligence/Combat Systems (C4I/CS) interoperability issues. NAVSEA 05 was assigned as the focal point for coordination and resolution of battle force interoperability issues and establishment of processes for defining, controlling, and certifying each Battle Force configuration prior to deployment. NAVSEA and OPNAV were to coordinate with the Fleet Commanders to develop and implement the improved Battle Force interoperability process that would be managed by NAVSEA. The NAVSEA responsibility currently resides in NAVSEA 05W4.

14.37.B Initially, NAVSEA assisted Fleet Commanders in developing the Battle Force Interoperability (BFI) Process, commonly called the "D-30" process, since the configuration and testing of each Battle Group/Amphibious Ready Group in preparation for deployment commenced 30 months prior to actual deployment. The Fleet Commanders published CINCLANTFLT/CINCPACFLT INST 4720.3A formalizing that process. Promulgation of the CNO's "Fleet Response Plan" (FRP) in 2003 made the D-30 process obsolete, because D-30 was Battle Group-centric and FRP is whole-Navy centric.

14.37.C In early 2003, the CNO announced the Fleet Response Plan (FRP) as direction to the Fleet for the deployment and maintenance policy for Navy ships. FRP introduced a "Surge" policy for early or emergency deployment of ships to join any already-deployed Strike Group, which made the "D-30" process obsolete. The "C5I Modernization Plan" (C5IMP) was then introduced as the new process for C5I SHIPALT installations management.

14.37.D In late 2003, an additional process, called "SHIPMAIN", was initiated. The objective of SHIPMAIN is to provide a verification of system requirements and naval budget affordability for C5I systems prior to their installation. Successful results from the SHIPMAIN process provide authority for subsequently scheduling SHIPALT installations using C5IMP.

14.37.E Current processes involve the development of a ship alteration (SHIPALT) to effect installation of a system into a naval ship, and gaining approval for that installation, installation scheduling, and Configuration Management of the system via several process steps.

### 14.38 Discussion

Overview. The "Afloat Master Planning System" (AMPS) was developed to assure Interoperability of C4I and ships' Combat Systems proposed for installation in naval ships prior to their being installed as a ship alteration (SHIPALT), and to provide an orderly process and procedures for the efficient implementation of ships' combat systems and C4I systems across the operational Navy Fleets. The primary intent of the process is to ensure combat deployers -- Carrier Strike Groups (CSG); Expeditionary Strike Groups (ESG) with embarked Marine Expeditionary Units (MEU); Pacific Fleet Middle East Force (PACMEF); Forward Deployed Naval Forces (FDNF); Mine Warfare Readiness Group (MIWRG); and other Fleet entities -- receive improved, certified warfighting technologies. The process currently applies to NAVAIR-produced systems that have ships' combat systems and/or interoperability considerations. This includes shipboard systems such as Air Traffic Control and Combat Identification (IFF); certain weapon systems such as Tomahawk; aircraft systems utilizing Tactical Data Links (TADIL); and systems that integrate on the IT-21 network, such as mission planning and various administrative, logistics and training systems.

### 14.39 Key Aspects

14.39.A C5IMP Process. The C5IMP process has as its objective obtaining approval for SHIPALT installations of C5I systems from the Fleet Commanders (FLTCOM). The process is based on conducting two annual meetings at which proposed SHIPALTs are presented to the FLTCOMs -- the "Initial Baseline Review" (IBR) for proposals, and the decision-making "Baseline Review Board" (BRB). The IBR and BRB consider

alterations into all Navy ships that have Availability periods during the following calendar year. Authorized installation periods are called the “Modernization Window” (MW). The list of all approved SHIPALT installations, as well as completed installations, for a given ship is called that ship’s C5I “baseline”.

14.39.B The basis for approval for a SHIPALT being listed in an approved C5I baseline is for a SHIPALT to have the following:

- SHIPALT approval by the applicable Ship Program Manager (PMS);
- Ship Change Document (SCD) approved under the SHIPMAIN process;
- Scheduling of the SHIPALT into the “Navy Data Environment—Navy Modernization” (NDE-NM) database to enable its consideration at the IBR/BRB meetings, and listing in the Afloat Master Planning System (AMPS) database;
- Approved Ship Installation Drawings (SID);
- Approved Integrated Logistics Support (ILS) Plan;
- Weapons Systems Explosive Safety Review Board (WSESRB) approval, as applicable;
- Preferred Product List (PPL), System/Subsystem Interface List (SSIL), and Qualified Parts List (QPL) approval for use of ships’ IT-21 Local Area Network (LAN), as applicable;
- Human/Systems Interface (HSI) approval;
- Combat Systems Interoperability Test (CSIT) approval, as applicable;
- Installation scheduled during the ship’s Modernization Window (MW), or approval for installation outside the MW (TCD Waiver).

14.40 Electronic Configuration Control Board (eCCB) Process. The applicable Fleet Commander must approve any changes to a ship’s baseline configuration of systems after establishment of that baseline at the Baseline Review Board (BRB). The Fleet Commander’s consideration of a change follows review by the Electronic Configuration Control Board (eCCB). eCCB membership consists of various stakeholders in the process, including NAVAIR’s eCCB representative. PMs developing and/or upgrading C4I and combat systems must ensure that any change to these systems (hardware/software upgrade; cancellation of a previously planned upgrade; etc.) is submitted to the eCCB for approval. NAVAIR’s eCCB representative to NAVSEA can assist in the submission of the required eCCB Risk Forms, and coordinate/advocate for approval.

14.41 Target Configuration Date (TCD) Waiver Process. The TCD is a date when all planned installations and the ILS Plan (especially crew training) in the ship are to be completed. No further upgrades to systems are allowed for the ship unless a waiver is requested and approved. The process to obtain a TCD Waiver is called a “TCD Offer”. The Fleet Commander will approve TCD Offers after coordinating with applicable TYCOMs, the ship involved, and Strike Force Commander. Key decision factors are: increased value to warfighter; impact on training and testing; impact if installation does not occur; risk of all kinds; extent of upgrade; proposed installation date. Requests for waiver will be made via an “A-through-O” (A-O) message.

14.42 A-O Message. A “TCD Offer” (A-O message) is required to request either a non-standard system installation or any installation after TCD of software/hardware associated with C4I/Combat Systems. CINCLANTFLT/CINCPACFLTINST 4720.3A specifies the format for the A-O message. The PM must submit the message for approval directly to the applicable Fleet Commander. A “non-standard installation” is a SHIPALT that is temporary in that it will be removed, and original ship’s configuration restored, after its usage. This is frequently the case for systems used in testing (DT/OT), demonstrations of new technology, and for Fleet exercises. NAVAIR’s representative to NAVSEA 05W4 can coordinate and assist in the preparation and submission of the A-O message.

14.43 Action Item Process. Throughout the C5IMP process, “action items” for NAVAIR are received from outside Commands. The actions may be to: resolve configurations of systems; resolution of problems identified in testing (BFIT, DGSIT); responses to A-O messages; solving problems encountered during installations in shipyards; etc. NAVAIR’s representative to NAVSEA 62 is often the focal point for C5IMP action items, if not sent directly to a NAVAIR project manager.

14.44 Certifications. System-level Certifications are normally obtained as part of the acquisition process.

Certain Certifications apply specifically to C4I/Combat Systems:

-- IT-21 Compatibility. Fleet Commanders have defined a policy and established procedures for IT-21 shipboard configuration management. They have established the Preferred Product List (PPL), System/Subsystem Interface List (SSIL), and Qualified Parts List (QPL) as the controlling authority for systems, computer programs, and hardware to connect with the IT-21 afloat network.

-- NCTSI. The Navy Center for Tactical Systems Interoperability (NCTSI) is assigned as the Chief of Naval Operations (CNO) representative responsible for certifying interoperability of U.S. Navy tactical data systems used in Fleet operations, or in support of Joint or Allied operations. Following successful completion of NCTSI certification, all U.S. Navy TADIL/C4I systems must be tested for Joint Procedural Interoperability Certification through the DISA (JITC).

-- DISA (JITC). For explanation of DISA (JITC) certification refer to Chapter VII Part C, "Interoperability" of this Guide.

14.45 Combat Systems Interoperability Test (CSIT). CSIT is a test for Interoperability of all systems' software proposed for installation in a given ship, or a group of ships with the same systems' configuration. Prior to installation of software with multi-systems interface, it must have successfully passed the CSIT test applicable to that ship.

14.46 Deploying Group System Integration Test (DGSIT). DGSIT is a Fleet Commander-directed process designed to provide a comprehensive validation of "total force system" performance prior to overseas deployment of a Strike Group (CSG or ESG). This involves not only systems operability and interoperability, but also validates that ships' crews received sufficient training to enable them to satisfactorily operate the ships' C4I and Combat Systems. PM involvement in DGSIT involves providing Subject Matter Experts (SME) to ships during conduct of the tests, and coordination in the resolution of reported issues. Issues are reported by the Fleet Commander's DGSIT office via naval message.

14.47 Information on the WEB: <https://www.nde.navy.mil/> (for C5IMP, NDE-NM, SHIPMAIN and AMPS)

14.48 POC: Andrew P. Miller, AIR-4.1.5, (301) 757-3252

## CHAPTER XIV: ENGINEERING DISCIPLINES

### PART I: DEFENSE NETWORK (DNET)

14.49 Purpose. The Naval Air Systems Command (NAVAIR) Defense Network (DNet) is a networked environment or infrastructure which enables NAVAIR facilities to support interoperability research, development, test, and evaluation (RDT&E) of naval air platforms in network centric warfare battlespace environments. The initial operating capability integrated nine laboratories and ranges within NAVAIR via flexible interfaces including HLA and an integrated series of tactical communications links to establish a re-configurable RDT&E federation. These sites are physically connected via a high-speed, secure ATM network known as the DREN.

14.50 Source Documents: DoDD 5000.1, DoDI 4630.8, CJCSI 3170.01C, and CJCSI 6112.01B.

#### 14.51 Discussion

14.51.A The NAVAIR DNet established a secure infrastructure for evaluating network centric warfare RDT&E concepts within NAVAIR and across other service and industry battlelabs, and ranges. This capability is used to ensure that Naval and Joint C4I systems are designed, developed, and tested in a realistic, cost effective mission-space environment to achieve systems interoperability and provide effective systems for the warfighter. The combined infrastructure provides an environment for hardware-in-the-loop (HWIL) representations of platforms and systems, tactical and strategic datalinks, Open Air Range (OAR) links to live aircraft, weapon systems, models and simulations, stimulators, instrumentation and data display and analysis tools. The DNet environment allows and facilitates different levels of fidelity as systems are developed and tested in a battlespace that combines modeling and simulation with open air range testing and training.

14.51.B The initial nine laboratories and ranges that constitute the NCW RDT&E DNet federation include the following:

- F/A-18 Advanced Weapons Laboratory, NAWCWD, China Lake, CA
- Integrated Battlespace Arena (IBAR), NAWCWD, China Lake, CA
- Land Range, NAWCWD, China Lake, CA
- Sea Range, NAWCWD, Pt. Mugu, CA
- Air Combat Environment Test & Evaluation Facility, NAWCAD, Patuxent River, MD
- E-2C System Test and Evaluation Laboratory, NAWCAD, Patuxent River, MD
- P-3 Air Surface Warfare Improvement Program Laboratory, NAWCAD, Patuxent River, MD
- Atlantic Test Range, NAWCAD, Patuxent River, MD

14.51.C Major resources provided by the NCW RDT&E DNet are as follows:

- Various environment generators such as the Integrated Joint Interim Mission Model (JIMM) Warfare Environment
- F/A-18, P-3, and E-2C HWIL Platforms
- Multiple weapon HWIL environments including Sidewinder, SLAM-ER, RAM, ESSM, and DAMASK
- Multiple weapon signal processor in the loop laboratory environments
- Link 4, Link 11, and Link 16 HWIL Systems and Stimulators for multiple platforms
- Global Positioning Systems, Communications, and IFF Stimulators
- OAR electronic warfare, communications, and datalinks
- Full aircraft telemetry and instrumentation suites
- Data reduction and analysis tools

14.51D Additional resources will be added to the infrastructure as needed to support future Navy and Joint test requirements.

14.52 Network Connectivity. Use of the DNet requires network access to the secure Secret Defense Research and Engineering Network (SDREN). Based on the specific program RDT&E requirements and existing network and communication capabilities in the desired laboratories and ranges, the DNet System Architect will provide connectivity requirements to utilize the following capabilities:

- Network encryption
- Network switches (ATM) and routers
- Secure Voice
- Tactical Voice (radios)
- Secure Video
- Real-time telemetry

14.53 POC: Eileen Shibley, AIR-4.7 (760) 939-2086

## CHAPTER XIV: ENGINEERING DISCIPLINES

### PART J: SOFTWARE DATA RIGHTS

#### 14.54 Source Documents:

- DFARS SUBPART 252.227-7203
- DFARS SUBPART 252.227.7013, .7014, .7015, .7017, 7018, and .7020

#### 14.55 Background

The key item to realize here is that without the proper wording in the contract, what contractor creates (*i.e., computer software, computer software documentation, or technical data*) ***the contractor owns (not the government)***. The Government typically receives only standard license rights to use that computer software, computer software documentation or technical data in certain limited ways and only if the proper data rights clauses are in your contract. These standard rights may or may not meet your needs. It is the responsibility of the contracting officer to put the proper data rights clauses in your contract but it is your responsibility to provide the contracting officer with a complete assessment of your work effort. This assessment should include a determination of your contemplated present uses of the software or other deliverables as well as an assessment of any future uses by you or others. This assessment is called a “Data Rights Requirements Analysis” (DRRA) and should be conducted ***prior to contract award***, taking into consideration such factors as multiple site or shared use requirements, and whether the Government’s software maintenance philosophy will require the rights to modify or have third parties modify the software. If the DRRA determines that the standard data rights clauses do not provide sufficient rights to meet your needs and the future needs of the federal government, additional rights may be obtained through negotiations with the contractor, sometimes at an additional cost. These negotiations will be conducted for you by the contracting officer.

#### 14.56 Process

Perform a DRRA, working closely with the patent counsel and contracting officer, to determine the minimum license rights that are required for your present needs and for any future needs that you or others may require. The DRRA should address the following:

- Is this a new or existing procurement?
- Do you have the proper rights in existing software or other deliverables, that permit the government to modify, in any way, that existing software for this new contracting effort?
- What type of procurement or assistance vehicle is/will be involved (CRADA, FAR contract, Other Transaction Agreement, Technology Investment Agreement, etc.).
- What clauses already exist regarding data rights?
- How much, if at all, might requiring more than restricted/limited rights diminish competition or increase procurement cost?
- Will one of the standard DFARS levels of data rights (“unlimited”, “government purpose” or “restricted/limited”) be acceptable, or do the data rights need to be specifically tailored/negotiated for this procurement?
- Does the number of anticipated changes to the software and the required response time for those changes warrant the possible additional cost or fewer bidders on the procurement?
- What is the likelihood that the government will perform the software maintenance (*i.e., error corrections and enhancements*) in-house?
- What is the likelihood that the software maintenance will be competed and awarded to a third party?
- Might there be any situations that would require licensing outside the federal government (*e.g., FMS or commercial*)?
- Do you require the rights to modify the deliverables now or in the future? Modifications include updates, corrections and enhancements.

- Do you need to maintain configuration control over the deliverables? If so, the government may obtain ownership of all or a part of the deliverables.

Don't forget to address both the long-term as well as the short-term needs, since software could be in use for 30 or more years.

After the DRRA has been conducted, the contracting officer will determine if the standard data rights clauses provide the rights that you and the government need to accomplish the stated objectives. If additional rights are required, the contracting officer will enter into negotiations with the contractor to acquire such rights.

#### 14.57 Lessons Learned

- The Data Rights Issue is very complex and requires expert guidance from a NAVAIR patent attorney and contracting officer to determine the best strategy.
- Inadequate data rights typically result in paying large sums of money to acquire the required rights or having only one option for software maintenance: sole source procurement to the creator of the software. While not ideal, a stop-gap measure to address the software data rights issue is to ask your Contracting Officer to include DFARS 252.227-7017 "Identification and Assertion of Use, Release, or Disclosure Restrictions" in your RFP since it requires the bidders to explicitly identify any restrictions on software data rights.

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|--|
| <p><b>REMEMBER: WITHOUT THE PROPER DATA RIGHTS, YOU WILL NOT BE ABLE TO LEGALLY USE YOUR DELIVERABLES THE WAY YOU WANT!!</b></p> |
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14.58 For more information contact the NAVAIR Software / Systems Support Center at, (619) 545-4832 or (301) 342-2103. Software engineering and acquisition information is also available on the Software Engineering Division website at <https://home.navair.navy.mil/src/>.

## CHAPTER XV: OTHER KEY TOPICS

### PART A: ALPHA ACQUISITION

15.1 Purpose. Alpha Acquisition is a concurrent versus serial approach which involves the integration of the Program/Project/Acquisition Manager (PM/AM), the Contracting Officer, the Contractor, the Defense Contract Audit Agency (DCAA), the Defense Contract Management Agency (DCMA), various field activities, and AIR-4.2 cost estimators into a cohesive team. The common goal is to acquire high quality goods and/or services for the Government in an expedited and efficient manner and at a fair and reasonable price.

#### 15.2 Discussion

15.2.A With Alpha Acquisition, Government and contractor personnel are included in the acquisition process from the inception of the requirement. In order to accelerate the time it takes to award a contract once a requirement is known, the Integrated Program (Product) Team (IPT) goes to the Contractor's plant, where they work hand-in-hand with the contractor, DCAA, DCMA, and other units as necessary (i.e., DCMA Quality Engineers). It has been NAVAIR's experience that for major procurements (exceeding \$100M), this process reduces to approximately four months the time it takes from agreement on the Statement of Work (SOW) until contract award. Development of the SOW and specification, which normally take about 126 days, is reduced by as much as 52 days (for consolidating responses, formal Command review, data review board, and delivery of a Procurement Initiation Document (PID) to AIR-2.0). Duplication is also eliminated from the procurement process because contractor personnel are involved in the design, manufacturing, and software development decisions of the RFP, if applicable, to the instant contract. Therefore, Government research of, and response to, contractor issues are all resolved during the development of the SOW and specification. These participants take ownership of the acquisition process from the beginning and become a Joint Industry/Government Team with a common purpose.

15.2.B The benefits of the use of Alpha Acquisition practices are reduced procurement acquisition lead times and also reduced costs. By including the DCAA and DCMA in the proposal preparation process their audits and technical evaluations can be completed more quickly since the need for follow-up audits and evaluations (generally driven by proposal updates) will be eliminated. The contractor benefits by significantly reducing proposal preparation costs.

15.2.C Alpha Acquisition is a framework for expediting the acquisition process. The purpose is to eliminate any unnecessary processes and reviews, and to streamline and conduct the required ones in parallel. Nevertheless, the same issues addressed in standard procurements are addressed in Alpha Acquisition, the same questions asked, and the same support provided. However, it is all done much more quickly and started earlier in the process.

15.2.D Alpha Acquisition is a labor-intensive process. For each such procurement, the IPT members may be away from the office for as much as 50 percent of the time over a period as long as a month of the total contracting time. Therefore, before deciding to use the ALPHA approach, the IPT leader should consider:

- ◆ While the members of the IPT are away from the office on this one procurement, how will the other program work be handled?
- ◆ Should there be specific criteria used to determine whether such a labor-intensive method is worthwhile (i.e., dollar threshold, higher level interest, funding jeopardy, degree of trust between the parties, etc)?
- ◆ What opportunities exist for use of video-teleconferencing versus travel?

15.3 Pre-requisites for Alpha Acquisition are:

- ◆ Good draft Statement of Work (SOW) with defined requirement,
- ◆ SOW, proposal, and business clearance spreadsheet, in accordance with Work Breakdown Structure (WBS),
- ◆ Contractor and Government negotiating teams use the same spreadsheet format and software version to facilitate negotiations and documentation,
- ◆ Team commitment to use of Alpha Acquisition practices throughout the acquisition process, and
- ◆ COMMUNICATION, COMMUNICATION, COMMUNICATION

15.4 A sample Alpha Acquisition approach and a sample Memorandum of Agreement immediately follow this section.

15.5 POC: , The cognizant program contracting officer or AIR-2.1.1, (301) 757-6596

## SAMPLE ALPHA ACQUISITION APPROACH

15.6 Alpha Acquisition is a concurrent versus serial process, both within the Government team and with the contractor team. The following is a **sample** approach that has been used for a development program. These steps should be tailored or, in some cases, eliminated (if the same technical requirement as the last procurement is to be used, then many of the following technical/Class Desk steps will be inapplicable) to fit the circumstances of the individual procurement:

- I. Procurement Planning Conference to develop understanding of requirements
- II. Formation of the “Alpha” Team:
  - Involve Team in all aspects of pre-procurement planning
  - Develop Government technical review team
  - NAVAIR/DCMA/etc.
  - Develop government cost/price review team
  - Investigate available areas of expertise
  - Naval Air Warfare Centers (NAWCs)
  - Establish relationship and open dialog with Field support agencies
  - EARLY INVOLVEMENT
- III. Good draft SOW with defined requirement
- IV. Preliminary (realistic) schedule
- V. ROM of budget parameters (forces contractor to propose creative solutions)
- VI. Periodic (i.e., weekly, biweekly) team meetings to discuss status/evolution of requirements.

### 15.7 PRE-RFP

- ◆ Conduct discussions with contractor to finalize a SOW and assure commitment on defined requirements
- ◆ Good up-front systems engineering
- ◆ Establish SOW based on WBS format
- ◆ Assign proposal review responsibilities to Government teams
- ◆ Establish proposal review process
- ◆ As part of the negotiation team, DCMA conducts a thorough RFP review before issuance of the RFP
- ◆ Develop coordinated (Gov’t/contractor/DCMA/DCAA) acquisition schedule the team will use to track its success
- ◆ Draft RFP, if necessary
- ◆ Advanced discussions on terms and conditions

### 15.8 RFP THROUGH PROPOSAL SUBMISSION

- ◆ Issue RFP which incorporates developed SOW, schedule, and format
- ◆ Government involvement in Contractor’s ground rules meeting
- ◆ Commence review and audit of proposal sections as they are written
- ◆ Technical review team assembled on-site under the control of the IPT for on-going “fact-finding” during proposal drafting
- ◆ Contractor establishes an on-site focal point for technical and contractual issues
  
- ◆ All team players available when required to discuss issues
- ◆ Document fact finding results throughout for use in field pricing report

### 15.9 PROPOSAL SUBMISSION AND REVIEW

- ◆ Proposal delivered directly to review activities for initial review
- ◆ Proposal review should largely be a formality, as Team reviewed proposal sections as they were completed
- ◆ All technical questions processed through IPT
- ◆ Conduct joint technical and cost reviews
- ◆ Written RFP questions to contractor (should be minimal) require written responses
- ◆ Only questionable responses require face-to-face meetings

### 15.10 NEGOTIATIONS

- ◆ The contractor's contracting officer and cost support members available at same location as PCO/contract specialist
- ◆ Only specific IPT members (i.e., PCO/contract specialist/technical team leader) are present during formal negotiations with contractor
- ◆ Technical sub-team leaders available on both sides to resolve any outstanding issues and fine tune technical requirements
- ◆ Standard spreadsheet becomes exhibit in the business clearance

## **SAMPLE MOA AS AN ALPHA ACQUISITION APPROACH**

15.11 Whereas our goal is to continue streamlining the acquisition process through the implementation of “Alpha Acquisition” and the greater use of the Integrated Program (Product) Teams, and whereas our goal is to establish a milestone schedule in order to accomplish an award not later than \_\_\_\_\_, and whereas the parties (as applicable: Contractor, Navy, DCAA, DCMA, and NAVAIR) agree that this MOA establishes the objectives and assumptions to be used in this process, therefore the parties agree as follows.

15.11.A The objectives are as follows:

- Improve the quality of the price and delivery proposal
- Increase understanding of the contractor’s estimating, price, and delivery proposal methodology
- Reduce the time required for discussions by conducting real time discussions of the cost elements of the proposal as they are completed
- Reduce the time required for Government technical evaluation by completing technical evaluations as the elements of the proposal are prepared
- Research consensus on contract terms and conditions early in the evaluation process
- Continue to pursue affordability initiatives to lower the cost

15.11.B The proposed Process and Advantages are summarized as follows:

### **Proposed Process**

- Mutual agreement of this MOA
- (Contractor name) provided with draft RFP for comment and discussion of terms and conditions
- Develop proposal evaluation milestones and schedule
- Formal request for proposal issued
- NAVAIR Pre-Negotiation Business Clearance (may be verbal presentation)
- Individual cost elements submitted as they are completed
- Fact-finding and discussions conducted between all parties (as applicable: contractor, DCMA, DCAA, and NAVAIR) according to the milestone schedule
- Frequent team meetings are held to review and understand estimates and proposal methodology as positions are developed and data is compiled for target, minimum, and maximum quantities (if applicable). Consensus on estimating methodology shall be reached to the maximum extent possible.
- Negotiation and Agreement on cost elements during the above process
- Submittal of profit initiative
- Agreement on profit
- Requirements finalized
- Submittal of proposal documenting agreements achieved for requirement
- Settlement with (name of contractor)
- (Contractor name) post negotiation “sweep” of current cost data
- NAVAIR post-negotiation clearance
- Award of contract

### ***Advantages***

- (Contractor’s name) proposal will correlate with the NAVAIR/(contractor name) agreed-to requirements

- Real-time discussions will identify and resolve issues early in the process and eliminate wasted effort
- NAVAIR/(contractor name)/ DCAA/DCMA will attend same fact-finding/discussion meetings, thereby eliminating the duplication of time and effort associated with multiple reviews
- Preliminary discussions and evaluations will be performed as estimating and proposal methodologies are developed, thereby reducing formal fact-finding and negotiation time
- Government and (contractor name) team members will develop a better understanding of the requirements, estimating methodology, price, and delivery proposal process.

15.11.C The assumptions and guidelines are as follows:

- This acquisition streamlining effort must be coordinated with the following:

| <b>Organization</b> | <b>PCO</b>                    |
|---------------------|-------------------------------|
| NAVAIR              | (NAME), PCO                   |
| (Contractor Name)   | (NAME), Contracts and Pricing |
| DCMA/(Location)     | (NAME), ACO                   |
| DCAA/(Location)     | (NAME), Resident Auditor      |

- All correspondence between NAVAIR and (contractor name) shall be sent through (Name), (Contractor name) Contracts and Pricing, and (Name), PCO. Copies shall be sent to (Name), ACO, DCMA (location), and (Name), DCAA/(location).
- (Contractor name) shall have full responsibility to prepare the price and delivery proposal. The Government’s role is to gain understanding of the proposal process and conduct “real-time” discussions with the objective of increasing the quality of the technical and cost evaluation while expediting the overall acquisition process. In turn, the Government will provide (contractor name) with the “real-time” information concerning non-restricted Government audits in order to gain an understanding of the Government position.
- DCAA auditors will maintain their independence from (contractor name’s) price and delivery proposal process. As (contractor name) presents various sections of the proposal, DCAA may attend for informational purposes only.
- The (contractor name)/NAVAIR/DCMA team will discuss and evaluate the methodologies as they are developed in accordance with the attached milestone schedule. Any agreements reached are preliminary in nature and subject to appropriate (contractor name) and NAVAIR management review. Nothing in this agreement will prohibit (contractor name)’s rights and flexibility in the areas of proposal preparation, estimating methodology, or any other contracting aspect. Nothing in this agreement will limit the audit scope on the part of DCAA. In addition, nothing in this streamlining initiative shall be used to circumvent or bypass Government laws, regulations, or the NAVAIR Business Clearance process. The contractor is still responsible for providing current, accurate, and complete cost and pricing data in the final price, and the delivery process shall be certified to the cut-off date agreed to in the milestone schedule. The proposal remains (contractor name)’s responsibility and must be certified.
- (If applicable) The attached schedule is part of this MOA and includes proposal milestones, schedules, and certification cut-off dates. Any revisions to the schedule shall be mutually agreed upon prior to incorporation.
- Key dedicated members of (program/project name) teams are identified in the attached list and will be responsible for obtaining any support needed.

- NAVAIR and (contractor name) will work together to establish ways to accelerate the phase book process. It is recognized that NAVAIR/(contractor name) supplier field audits are critical to reducing the proposal evaluation cycle. Therefore, every attempt will be made to reduce the turnaround time to 30 days (or any more appropriate time for the procurement in question) from the date of request. In addition, issues will be identified in real-time prior to completion of audits to facilitate timely resolution solution.
- The NAVAIR team will coordinate activities with the objective of reducing/eliminating duplicative evaluation efforts.

## CHAPTER XV: OTHER KEY TOPICS

### PART B: ADVISORY AND ASSISTANCE SERVICES

#### 15.12 Source Documentation:

OMB Circular Number A-11 of 27 May 03  
DoD FMR 7000.14R Volume 2b (Chapter 19)  
FAR Subpart 37.2  
SECNAVINST 4200.31C of 22 Jun 93, subj: Acquiring and Managing Consulting Services  
AIR-7.6 memo 7000 Ser AIR-7.6.2.1/290 of 9 Dec 99  
NAVAIR ltr 7000 Ser AIR-7.6.3CM/98-027 of 17 Jun 98

15.13 Definition. Advisory and Assistance Services (A&AS), previously referred to as Consulting Services, Contracted Advisory and Assistance Services, and Contractor Support Services, are advisory and assistance services procured by contract from non-Government sources to: a) support and improve organizational policy development, decision making, management, and administration; b) support program or project management and administration; c) provide management and support services for R&D activities; d) provide engineering and technical support services; or e) improve the effectiveness of management processes and procedures.

15.14 Discussion. A&AS is identified as object classification 25.1 in the PB-15 budget exhibit. The PMA/RFM is responsible for planning, budgeting, accounting, and reporting A&AS which are procured by a Working Capital Fund (WCF) activity (in support of his/her customer order). WCF activities are only responsible for A&AS associated with overhead (i.e., indirect) function. Funds issued for A&AS must continue to cite object classification code 25.1, the appropriate A&AS work breakdown structure (WBS) element in the line of accounting (LOA), and a separate accounting classification reference number/LOA/billing element for each A&AS category. Regardless of whether funds are accepted on a reimbursable or direct citation basis, A&AS efforts are always identified by object classification code 25.1.

15.15 Categories. Advisory and Assistance Services are comprised of three categories, which are described below:

15.15.A Management and Professional Support Services (MSS). Contracted services, usually closely related to the basic responsibilities and mission of the agency contracting the function, that provide assistance, advice, or training for the efficient and effective management and operation of organizations, activities (including management, scientific, and engineering support services for R&D activities), or systems. Examples of MSS services include:

- 1) efforts that support or contribute to the improved organization of program management, logistics management, project monitoring and reporting, data collection, budgeting, accounting, auditing, and technical support for conferences and training programs;
- 2) services to review and assess existing managerial policies and organizations;
- 3) development of alternative procedures, organizations, and policies; and
- 4) examination of alternative applications and adaptations of existing or developing technologies.

15.15.B Studies, Analyses, and Evaluations (SAE). Contracted services that provide organized, analytic assessment/evaluations in support of policy development, decision making, management, or administration. Includes studies in support of R&D activities and obligations for models, methodologies, and related software supporting studies, analyses, or evaluations. Examples of SAE services include:

- 1) analysis of alternatives (previously referred to as cost/benefit, or effectiveness analyses) of concepts, plans, tactics, forces, systems, policies, personnel management methods, and programs; studies specifying the application of information technology and other information resources to support mission and objectives;
- 2) technology assessments and management and operations research studies in support of R&D objectives;

- 3) evaluations of foreign force and equipment capabilities, foreign threats, net assessments, and geopolitical subjects;
- 4) analyses of material, personnel, logistics, and management systems; and
- 5) environmental impact statements.

15.15.C Engineering and Technical Services (ETS). Contractual services used to support program offices during the acquisition cycle. Efforts include systems engineering and technical direction (as defined in FAR 9.505-1(b)) required to ensure the effective operation and maintenance of weapons systems or major systems or to provide direct support of a weapons system that is essential to R&D, production, or maintenance of the system. Examples of ETS services include:

- 1) determine system performance specifications;
- 2) identify and resolve interface problems;
- 3) develop test requirements, evaluate test data, and oversee test design; and
- 4) develop work statements, determine parameters, oversee other contractor's operations, and resolve technical controversies.

15.16 Funding. Funding for A&AS efforts should be consistent with the appropriation sought to be charged. Specifically, RDT&E may fund A&AS efforts when integral to the technical execution of the R&D project; procurement accounts may fund A&AS efforts directly related to the support of the system being produced; and O&M,N funds A&AS efforts for out-of-production and in-service systems/equipment and A&AS in direct support of NAVAIR headquarters management functions, systems project offices, and acquisition managers.

15.17 POC: Cindy Meyer, AIR-10.3, (301) 757-7807 (Policy)  
Beth Butler, AIR-10.3, (301) 757-7781(PB-15 Budget Exhibit)

## CHAPTER XV: OTHER KEY TOPICS

### PART C: SMALL BUSINESS UTILIZATION POLICY AND PROCEDURES

#### 15.18 Purpose

15.18.A The Small Business Act, Public Law 85-536, as amended, states that “It is the declared policy of the Congress that the Government should aid, counsel, assist, and protect, insofar as is possible, the interests of small-business concerns in order to preserve free competitive enterprise, to insure that a fair proportion of the total purchases and contracts or subcontracts for property and services for the Government (including but not limited to contracts or subcontracts for maintenance, repair, and construction) be placed with small business enterprises, to insure that a fair proportion of the total sales of Government property be made to such enterprises, and to maintain and strengthen the overall economy of the Nation.” This statement also includes contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. Heads of contracting activities are responsible for effectively implementing the small business programs within their activities, including achieving small business program goals/targets.

15.18.B The Act requires each agency with contracting authority to establish an Office of Small Business Programs (OSBP). The NAVAIR OSBP head is appointed by the Commander, NAVAIR, or his deputy and is responsible for carrying out the functions and duties in sections 8, 15, and 31 of the Small Business Act. The OSBP cooperates and consults on a regular basis with the Small Business Administration (SBA) in carrying out NAVAIR’s functions and duties regarding the Act. Small Business Specialists make recommendations in accordance with agency procedures as to whether a particular acquisition should be awarded as a small business set-aside, as a Section 8(a) award, as a HUBZone set-aside, or as a service-disabled veteran-owned small business set-aside. Contracting activity Small Business Deputies perform this function by: 1) reviewing and making recommendations for all acquisitions over \$10,000; 2) making the review before issuance of the synopsis and documenting it on a DD Form 2579, Small Business Coordination Record; and 3) referring recommendations that have been rejected by the contracting officer to the SBA Procurement Center Representative (PCR).

15.18.C Section 15 of the Small Business Act states that **each contract for the purchase of goods and services that has an anticipated value greater than \$3,000 but not greater than \$100,000 shall be reserved exclusively for small business concerns** unless the contracting officer is unable to obtain offers from two or more small business concerns that are competitive with market prices and are competitive with regard to the quality and delivery of the goods or services being purchased.

#### 15.19 Source Documentation and Guidance:

Public Law 85-536, as amended, The Small Business Act  
Section 1207 of Public Law 99-661, National Defense Authorization Act for FY87  
Title 13, Code of Federal Regulations, Business Credit and Assistance  
Title 15, United States Code, Section 631, Declaration of Policy on Aid to Small Business  
Federal Acquisition Regulation (FAR) Parts 7, 8, 10, 19, 26  
Defense Federal Acquisition Supplement (DFARS) Parts 207, 208, 215, 226, 235  
Navy Marine Corps Acquisition Regulation (NMCARS) Parts 5207, 5213, 5219  
NAVAIRINST 4200.36D, Acquisition Plans  
Contract Competency Instruction 4200.42B, Procedure for Review and Approval of Small Business Subcontracting Plans  
NAVAIR OSBP Website at <http://www.navair.navy.mil/osbp/>  
Central Contract Registration, Dynamic Small Business Search, Website at <http://www.ccr.gov>  
Veterans in Business website at <http://www.vetbiz.gov>  
NAVAIR OSBP Community of Interest (COI) website at <https://mynavair.navair.navy.mil/osbp>

## 15.20 Small Business Programs

15.20.A The Department of the Navy is required by statute to implement eight basic small business programs. An awardee may possibly meet requirements of seven of these programs at the same time with the Navy receiving credit in all seven programs.

**Small Business (SB)** – Located in U.S, organized for profit, including affiliates is independently owned & operated, not dominant in field of operations in which it is bidding on Government contracts, AND meets SBA size standards included in the solicitation.

**NAICS Code** - The size standard is based upon the North American Industrial Classification Standard (NAICS) assigned to the specific procurement dependent upon product/service purchased. The Contracting Officer determines the appropriate NAICS code and related small business size standard, in coordination with the appropriate NAVAIR Small Business Specialist and the SBA's PCR have the opportunity to comment on the selected NAICS Code early in the acquisition process when reviewing the Small Business Coordination record DD2579. The NAICS manual is available online at [www.census.gov/epcd/www/naics.html](http://www.census.gov/epcd/www/naics.html).

**Woman-Owned Small Business (WOSB)** – Small Business, at least 51% owned by ≥ 1 women, AND management & daily business operations controlled by ≥ 1 women.

**Small Disadvantaged Business (SDB)** – Small Business, unconditionally owned & controlled by ≥ 1 socially & economically disadvantaged individuals who are of good character & citizens of the U.S., AND SBA-certified.

**Small Disadvantaged Business 8(a) Certified [8(a)]** – Small Business, SBA-certified as a SDB, AND SBA-certified into the 8(a) Business Development Program for a period of 9 years. **Limited sole source authority without advertising.** For more information, including an 8(a) Program Fact Sheet, go to the OSBP's Community of Interest (COI) located on the MyNAVAIR web site <https://mynavair.navair.navy.mil/osbp>.

**Historically Underutilized Business Zone (HUBZone)** – Small Business, owned & controlled 51% or more by ≥ 1 United States citizens, AND SBA-certified as a HUBZone concern (principal office located in an economically-distressed HUBZone area AND ≥ 35% of employees live in any designated HUBZone). **Limited sole source authority without advertising.** For more information, including a HubZone Fact Sheet, go to the OSBP's COI located on the MyNAVAIR web site <https://mynavair.navair.navy.mil/osbp>.

**Veteran-Owned Small Business (VOSB)** – Small Business, veteran-owned as defined in 38 USC 101(2), ≥ 51% owned by ≥ 1 veterans, AND management & daily operations controlled by ≥ 1 veterans.

**Service-Disabled Veteran Owned Small Business (SD-VOSB)** – Small Business, veteran-owned, ≥ 51% owned by ≥ 1 service-disabled veterans, AND management & daily business operations controlled by ≥ 1 service disabled veterans OR in the case of veteran with permanent & severe disability, the spouse or permanent caregiver of such veteran, AND with 0% - 100% service-connected disability as defined in 38 USC 101(16) & documented on DD 214. **Limited sole source authority without advertising.** For more information, including a SDVOSB Fact Sheet, go to the OSBP's COI located on the MyNAVAIR web site <https://mynavair.navair.navy.mil/osbp>.

**Historically Black Colleges & Universities/Minority Institutions HBCU/MI** – An HBCU is an accredited institution established before 1964 whose principal mission is education of black Americans. MIs are institutions meeting requirements of Higher Education Act of 1965 and Hispanic-serving institutions defined at 20 USC 1059. The Secretary of Education must designate HBCUs/MIs. A list can be located at <http://www.molis.us/default.asp>.

## 15.21 Small Business Goals/Targets

Government wide small business goals are established each Fiscal Year by the President. Notwithstanding the government wide goals, each procuring agency will have annual goals that represent the maximum practicable opportunity for Small Business participation. Each Fiscal Year, the NAVAIR OSBP negotiates small business targets with the Department of the Navy's OSBP. Once these negotiations are complete, the NAVAIR OSBP

Associate Director assigns targets to NAVAIR's Business Units. NAVAIR's SB targets and performance data are available on the NAVAIR OSBP's COI as well as the NAVAIR OSBP's public web site. Achieving NAVAIR's targets takes teamwork and is the responsibility of all NAVAIR acquisition personnel.

NAVAIR's OSBP manages the activity's SB functions, including providing periodic reports to the commander/commanding officer on overall SB Program implementation at the activity. They also assist and advise contracting and project personnel, to include Program Executive Officers on SB Program-related regulatory, policy and directive requirements. The NAVAIR OSBP establishes processes and procedures for the command's SB program.

By reviewing proposed contracting actions, reviewing acquisition plans and acquisition strategy documents, participating in source selections, and reviewing subcontracting plans, the NAVAIR OSBP works to ensure that a fair proportion of contracts are placed with small businesses.

### 15.22 Acquisition Planning

15.22.A Acquisition planners, to the maximum extent practicable, are required to structure contract requirements to facilitate competition by and among small business concerns, and avoid unnecessary and unjustified bundling that precludes small business participation as contractors (see NAVAIRINSTR 4200.36D, FAR 7.107 and 15 U.S.C. 631(j)). To meet this requirement, the NAVAIR OSBP should be a participant in the development of the Acquisition Strategy and is a required reviewer of Acquisition Plans. The OSBP is also available to assist with Market Research as required in FAR Part 10. Website resources available to locate small businesses are at the NAVAIR OSBP Website and the NAVAIR OSBP COI website.

15.22.B For Competitive Acquisitions that are not set-aside for small business, DFARS 215.304 states "the extent of participation of small businesses and historically black colleges or universities and minority institutions in performance of the contract shall be addressed". Your OSBP can assist you with the appropriate language, which will be tailored for individual procurements, for your Source Selection Plan and RFP.

15.22.C For Broad Agency Announcements, to help achieve the goals of Section 1207 of Public Law 99-661, contracting officers shall 1) whenever practicable, reserve discrete or severable areas of research interest contained in broad agency announcements for exclusive competition among historically black colleges and universities and minority institutions; and 2) indicate such reservation in the broad agency announcement, and in the announcement synopsis.

### 15.23 Small Business Set-Asides

The term "set-aside for small business" means the reserving of an acquisition exclusively for participation by small business concerns. Set asides may be total or partial. Regulatory coverage of small business set-asides is found at FAR Subpart 19.5.

### 15.24 Small Business Subcontracting Program

15.24.A The Small Business Subcontracting Program is another means for supporting the small business industrial base with increased opportunities for participation in procurement by various socio-economic groups. For more information, including a Fact Sheet entitled DOD Subcontracting Program the Basics, go to the OSBP's COI located on the MyNAVAIR web site <https://mynavair.navair.navy.mil/osbp>.

15.24.B FAR 19.7 requires that an acceptable subcontracting plan be submitted to the Government for all contract actions with large business concerns that exceed \$550,000 (inclusive of options). The PCO is responsible for reviewing subcontracting plans as specified in FAR 52.219-9, Small Business Subcontracting Plan. Further, the contract file must be documented to reflect the review and the PCO's final decision relative to an acceptable subcontracting plan.

15.24.C OFPP Policy Letter 80-2, Supplement No. 1 states that subcontracting plans must be included, pursuant to Public Law 95-507, in contracts and contract modifications over the statutory threshold (\$550,000). NAVAIR

Contracts Competency Instruction 4200.42B dated 23 July 2007, identifies the procedures for review and approval of subcontracting plans. Routing and approval of the subcontracting plan, and subcontracting plan checklist should be initiated by the PCO as soon as proposals are received in order for all team members to have adequate time for proper review.

15.24.D If it is determined that there are no subcontracting opportunities available within the procurement and that a subcontracting plan is not required, a determination signed at a level above the PCO must be placed in the contract file in accordance with FAR 19.705.2(c). This determination shall be made on page three of the subcontracting plan checklist after coordination with the NAVAIR OSBP and SBA PCR.

#### 15.25 Lessons Learned

- Acquisition Plans that are not reviewed by the NAVAIR OSBP often have missing or inadequate language addressing small business participation in the procurement. The earlier the OSBP is brought into the procurement strategy, the easier and quicker it is for procurement documents to be reviewed.
- A Sources Sought Synopsis is a good tool to assist with market research, and should be done early in the procurement cycle. New small businesses enter the marketplace every day. Just because a small business was not found the last time the procurement was competed does not mean that a small business is not available now.
- The Small Business Coordination Record DD Form 2579 should be completed prior to synopsis of a requirement. Time is often wasted if a competitive requirement is synopsized as full and open competition, and then the requirement is determined to be set-aside for small business. Another synopsis would be required to correct the previous announcement.

15.26 POC: Emily Harman, Associate Director, NAVAIR OSBP, AIR 09D, (301) 757-9044

## CHAPTER XV: OTHER KEY TOPICS

### PART D: STATEMENT OF WORK (SOW)/STATEMENT OF OBJECTIVES (SOO)

#### 15.27 Source Documentation:

**MIL-HDBK-245D**, Preparation of Statement of Work (SOW)

**MIL-HDBK-881**, Work Breakdown Structure

**MIL-HDBK-248B**, Acquisition Streamlining

Federal Acquisition Regulations/Defense Federal Acquisition Regulations (**FAR/DFAR**)

15.28 Purpose. The Statement of Work (SOW) should specify in clear and understandable terms the work to be performed in developing or producing goods to be delivered or services to be performed by a contractor. It should provide a consistent, orderly and complete description of the work required. Preparation of an effective Statement of Work requires both an understanding of the goods or services that are needed to satisfy a particular requirement and an ability to define what is required in specific, performance based qualitative terms. It is essential that the person preparing the SOW understand the design concept of the deliverable product and/or the scope of the services to be performed. A SOW prepared in explicit terms will enable offerors to clearly understand the government's needs. This facilitates the preparation of responsive proposals and delivery of the required goods or services. A well-written SOW also aids the Government in conduct of the source selection and contract administration after award. A Data Requirements Review Board (DRRB) may review each SOW to ensure compliance with the policy, guidance and procedures contained in MIL-HDBK-245D.

#### 15.29 Guidance

15.29.A Prior to the formulation of the (PID), the SOW should be prepared by the Integrated Program Team (IPT), and coordinated with the Program Manager. The PM has overall responsibility for the preparation, review and approval of the SOW. The SOW preparation begins with the review of the Capability Development Document (CDD), and other appropriate planning documents, such as the Systems Engineering Management Plan (SEMP), Acquisition Plan, Acquisition Logistics Support Plan (ALSP), Work Breakdown Structure (WBS), and the specification. Every effort to describe the work with some degree of precision should be made so that the parties will not only have an understanding of what is expected, but the contract itself will not be rendered invalid for vagueness. NAVAIRINST 4120.9A (draft) addresses preparation of program unique specifications for NAVAIR programs.

15.29.B The PM should address the preparation of the WBS, SOW, and CDRLs at the Procurement Planning Conference (PPC) with the IPT functional representatives present. Each IPT must make every effort to adequately describe the work task so that the contractor will have a clear understanding of what is expected. These documents should be consistent with the requirements stated in other acquisition documentation.

15.29C After contract award, the SOW becomes the standard for measuring the contractor's effectiveness. The contractor will refer to the SOW to determine his rights and obligations with regard to work tasks. A clearly defined scope of effort will enhance the legal supportability, if the need arises. Therefore it is imperative to apply the following rules when writing a SOW:

#### **DOs**

- ◆ Use the WBS to outline the required work effort.
- ◆ Express the work to be accomplished in work terms.
- ◆ Explicitly define the tailored limitations of applicable documents.
- ◆ Use shall whenever a provision is mandatory.
- ◆ Use will only to express a declaration of purpose.
- ◆ State what needs to be accomplished, NOT HOW.
- ◆ Exclude design control or hardware performance.

- ◆ Identify either CDRL number or DID number in parentheses at end of a SOW paragraph when data is to be developed/delivered.

**DON'Ts**

- ◆ Do not develop data content or data delivery schedules in the SOW. The DID describes the data content and format, and the CDRL orders the specific delivery times.
- ◆ Do not include proposal criteria
- ◆ Do not include instructions to the contractor
- ◆ Do not include qualifications of contractor personnel
- ◆ Do not include conditions of Security or clearance
- ◆ Do not discuss contract clauses.
- ◆ Do not amend contract specifications.
- ◆ Do not invoke entire applicable documents unless needed to meet minimal need.

15.30 Purpose. A Statement of Objectives (SOO) is an option provided by MIL-HDBK-245D which can be used instead of a SOW. The **SOO** expresses the basic, top-level objectives of the acquisition and is provided in the PID/solicitation in lieu of a government-written SOW. This approach gives Offers the flexibility to develop cost-effective solutions with the opportunity to propose innovative alternatives that meet those objectives.

15.31 Guidance. The SOO is a government-prepared document, usually two to four pages, incorporated into the PID/ solicitation that states the overall solicitation objectives and request that the Offerors provide a SOW in their proposals. The SOO may be included as an attachment to the solicitation, listed in Section J, or referenced in Section L and/or M. The SOO does not become part of the contract. Instructions for the contractor prepared SOW should be included in Section L. This is a fundamental part of the solicitation development with major impacts to Sections L and M. The following provides the conceptual process for developing the SOO.

The IPT team develops a set of objectives compatible with the overall program direction including the following:

- a. The user(s) Capability Development Document (CDD),
- b. Program Initial Capabilities Document (ICD),
- c. Draft technical requirements (system spec), and
- d. A draft WBS and dictionary

Once the program objectives are defined, they will need to be focused so that the SOO addresses product-oriented goals rather than performance requirements. The SOO is replaced at contract award by the proposed SOW.

15.32 Lessons Learned. The SOW/SOO developer should:

- ◆ know the contract/program detailed requirements
- ◆ research the applicable regulations, policies and procedures
- ◆ know that the SOW is not a miscellaneous catch-all document
- ◆ know that a SOW is a requirements document representing work needs
- ◆ know that technical performance requirements (specification) should not be in the SOW
- ◆ know that the SOW task may result in the generation of data, and that the task should not directly address the preparation of data, and know that Block 5 of the CDRL must reference the correct SOW paragraph that describes the performance based work effort that results in the data being developed and delivered.

For additional information, please visit the website at: <http://home.navair.navy.mil/pmcwebtool/>.

15.33 Available Training Courses:

- Writing Performance Based Statements of Work ( listed under the Procurement & Contracting tab)
- Writing Better Performance Statements of Work (listed under the DAWIA Continuous Learning tab)

15.34 POC: Each respective PMA APMSE (Class Desk) or Competency designated subject expert

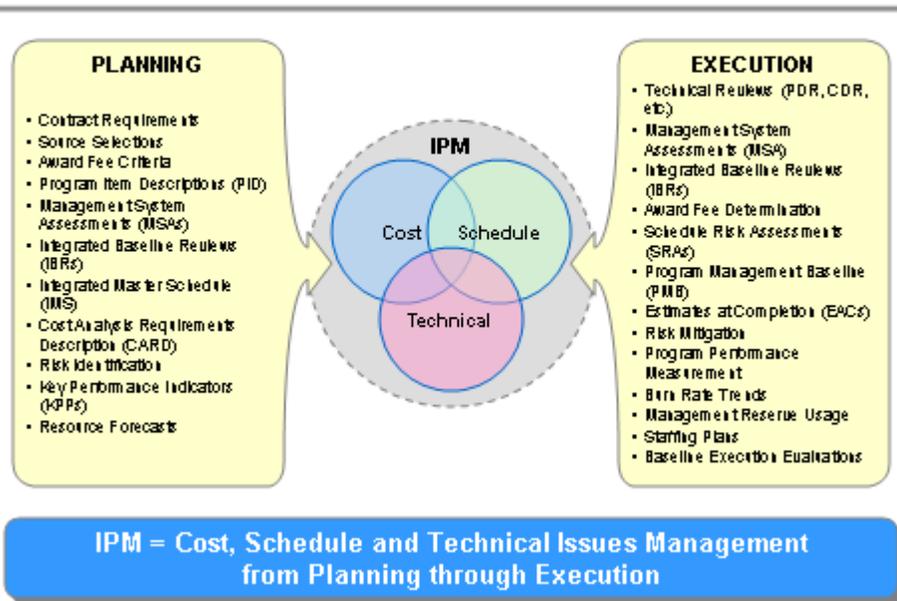
## CHAPTER XV: OTHER KEY TOPICS

### PART E: INTEGRATED PROJECT MANAGEMENT/EARNED VALUE MANAGEMENT

15.35 Discussion. Integrated Project Management (IPM)/Earned Value Management (EVM) is a systematic approach that integrates the various management subsystems to facilitate the completion of projects within cost, schedule and scope constraints regardless of whether it is contractor or organic (in-house) effort. An EVM System incorporates best business practices that impact all of an organization's subsystems needed to manage and gauge the health of a project. After the management processes are in place, IPM/EVM provides project managers integrated visibility into a project's cost, schedule and technical progress (see "Integrated Project Management" chart). Implementation of EVM should be on projects that are over twelve months in duration, non level-of-effort type work, and over \$20M. Efforts greater than \$50M require the use of a formerly validated EVM system in accordance with American National Standards Institute/Electronics Industries Alliance (ANSI/EIA) Standard-748. In general EVM is not implemented on Firm Fixed Price efforts; however, if the program manager for a Firm Fixed Price effort believes there is sufficient risk they may choose to require using EVM. The main deliverable reports from contractors for EVM is the Contract Performance Report and the Integrated Master Schedule.

15.36 POC: Chris Mushrush, AIR-4.2.3, (301) 342-2396

### INTEGRATED PROJECT MANAGEMENT (IPM)



## CHAPTER XV: OTHER KEY TOPICS

### PART F: ENVIRONMENTAL, SAFETY AND OCCUPATIONAL HEALTH ISSUES

15.37 Purpose. This section identifies NAVAIR expertise and resources available to support the integration of environmental, safety and occupational health (ESOH) requirements into a program's acquisition life cycle. It is also intended to help acquisition managers understand the ESOH requirements that exist in the acquisition process.

#### 15.38 Source Documents:

DoDI 5000.2, Encl 3 Table E3.T1, Encl 7 Section E7.7

Defense Acquisition Guidebook, Sections 2.3.14, 4.4.11, 5.5.12, 6.2.5.3, 9.1.7, Encl 7 (E7.1.6) DoD 6055.9-STD

SECNAVINST 5000.2D

SECNAVNOTE 5400

OPNAVINST 5090.1B

OPNAVINST 5100.23F

NAVAIRINST 5090.2, Ozone Depleting Substances Policy

Executive Orders (EOs) 12114, 12898, 13101, 13123, and 13148

15.39 Discussion. The Assistant Secretary of the Navy for Research, Development & Acquisition (ASN(RD&A)) has issued policy requiring that program managers (PMs) ensure their programs have minimal ESOH impacts during fleet operations. DoDI 5000.2 requires program managers to conduct a programmatic ESOH evaluation (PESHE) as part of the acquisition strategy to ensure that impacts are identified and mitigated. Guidance on the suggested format for documentation of this evaluation is available at the AT&L KSS website

<http://akss.dau.mil/jsp/default.jsp> (do a search for "PESHE"). Additional guidance can be obtained by contacting AIR-1.6. Regardless of how it is conducted, this evaluation must address each of the six specific ESOH risk areas: a) National Environmental Policy Act, b) Environmental Compliance, c) Safety and Health, d) Hazardous Materials, e) Pollution Prevention, and f) Explosive Safety.

#### 15.40 Resources

15.40.A The Environmental Programs (AIR-1.6) is dedicated to providing oversight for environmental lifecycle management and ensuring that acquisition program managers understand and comply with environmental requirements identified in Department of Defense Instruction (DoDI) 5000.2, as well as the National Environmental Policy Act (NEPA).

15.40.B AIR-1.6 is NAVAIR's single focal point for the coordination and dissemination of environmental requirements and policies. AIR-1.6's mission is to support the Naval Aviation Enterprise mission by providing Acquisition Program and Fleet Managers with environmental knowledge and efficient/cost effective services to meet milestone decision authority and operational test requirements.

15.40.C The AIR-1.6 Environmental Programs Office is comprised of Headquarters staff members who:

Develop and issue Command's Policy, Procedures, and Guidance

Provide and maintain a knowledge base of expertise to support Acquisition Program Managers

Environmental Needs and Requirements

Provide technical support required to assist Program Managers with maintaining Environmental Compliance

Perform quality assurance/quality control review of applicable acquisition documentation (PESHE, NEPA, TEMP, ORD, etc.) and products and services

Identify and manage environmental business processes and resources to provide program managers maximum efficiency and LCC savings

- Develop and maintain tools to support standardization of environmental assessments to reduce risks and liabilities.

15.40.D Environmental experts throughout the NAVAIR community (including the Naval Air Warfare Centers and the Naval Air Depots) help AIR- 1.6 personnel ensure that a Program Manager's environmental risks are adequately addressed in their acquisition documentation and provide technical support in the following areas:

- a) ESOH coordination (direct program support);
- b) Development of environmental program documentation, including:
  - Programmatic Environmental Safety and Health Evaluations (PESHE),
  - National Environmental Program Act (NEPA) compliance schedules,
  - Milestone Decision Authority (MDA) exit criteria,
  - Hazardous Material Management plans, and
  - Deactivation, Demilitarization & Disposal (3D) plans;
- c) Performance of environmental analyses;
- d) Requirements and data management; and
- e) Development and application of tools to support environmental analysis, assessments and the standardization of environmental management procedures across the Command.

#### 15.41 Policy & Programs

15.41.A AIR 1.6 is responsible for issuing environmental policies impacting NAVAIR acquisition programs. Policies are developed and coordinated with Program Executive Offices (PEOs) and/or NAVAIR acquisition staffs through the PMCSD working group.

15.41.B AIR-1.6, in conjunction with the Office of Counsel (AIR-11.0), provides technical and legal support to all PEOs and acquisition programs to ensure compliance with environmental laws, regulations and specifically NEPA. AIR-1.6 is responsible for the development of internal processes related to NEPA and liaison to the Chief of Naval Operations Environmental Readiness Division for adherence to the Navy's environmental policies and procedures.

#### 15.42 AIR-1.6 Products and Services

15.42.A To ensure an effective ESOH risk management and analysis for the Program Manager's Acquisition Strategy, AIR 1.6 has developed the following products:

- Environmental Compliance Calendar. The Environmental Compliance Calendar is a database tool used to rank all ESOH (local, State, Federal, and outside the Continental United States) regulations and determine their impact on operational readiness. The Compliance Calendar is effective for understanding the status and timeline of new regulations and developing a strategic plan to ensure timely compliance.
- PESHE Document Authorizing Tool (PESHE DAT). The programmatic Environment, Safety & Occupational Health (ESOH) Evaluation (PESHE) Document Authorizing Tool (PESHE DAT) is a web-based application designed to assist acquisition system program managers and ESOH coordinators with ESOH life cycle planning and development of PESHE documentation. PESHE DAT also serves as a knowledge base repository of PESHE documents developed within the Tool and guidance to the user on ESOH requirements. It also offers a search capability to conduct comparative analyses between PESHE documents maintained in the knowledge base.
- Environmental Systems Allocation (ESA) Model. The ESA model is a database tool that manages environmental, safety, and health (ESH) information and data from organizational (O), intermediate (I), and depot (D) level naval aviation maintenance operations. The ESA model provides summaries of hazardous material (HM) usage and hazardous waste (HW) generation information that can be

presented from a variety of perspectives. ESH information can be presented by platform or activity, and allocated down to O, I, or D level maintenance operations and work centers/shops.

- Hazardous Material Authorized User List Analysis Tool. The Hazardous Material Authorized Use List (HMAUL) Analysis Tool or HAT is a software application intended to assist program managers in the identification and reduction of hazardous materials and obsolete specifications in NAVAIR maintenance manuals which includes:

- specifications/NSN requirements
- chemical constituents of products supplied to specifications/NSNs
- technology insertion opportunities related to required specifications/NSNs
- cancelled, inactive specifications
- capture process changes
- prioritization of issues (ESA)

15.42.B To ensure effective Fleet support and ESOH technology transition management and analysis, AIR- 1.6 utilizes the following products and services:

- Naval Aviation Technology Integration Program (NATIP). AIR-1.6 established NATIP to speed up the transition of innovative maintenance technologies (materials and processes) out of the NAVAIR laboratories and into the hands of the Fleet. In particular, NATIP offers a roadmap to guide the successful integration of maintenance technologies across the NAVAIR community. NATIP will ensure that stakeholder/users appreciate the seamless integration of approved technologies into the NAVAIR community, thereby improving Fleet readiness and maximizing return on NAVAIR's investments.
- Environmental Information Exchange (EIE). Each year, AIR-1.6 sponsors the Fleet EIE to address the outstanding environmental management needs of aviation maintenance personnel through the timely exchange of advice about innovative maintenance practices and technologies.
- Customer Support Group (CSG). AIR-1.6's CSG makes regular visits across the globe to help Fleet maintenance personnel with their environmental management challenges on their home turf. During these site visits, experts from the CSG identify the existing environmental challenges, provide real-time solutions, and document all actions taken, including those actions that may require additional follow-up once the site visit is completed.

15.42.C The Benefits of Using AIR-1.6 Product & Services

Through the effective planning, management, tracking, and monitoring of available resources, AIR-1.6 is institutionalizing sound ESOH principles across NAVAIR. The benefits of this process include:

- a. Reducing environmental risks and liabilities,
- b. Achieving environmental benefits and cost savings,
- c. Improving industrial processes,
- d. Achieving program missions at a competitive advantage, and
- e. Maintaining environmental compliance.

15.42.D How to Acquire AIR-1.6 Products & Services

To acquire any of the products or services offered by AIR-1.6, contact the POC listed below at least 12 – 18 months prior to a scheduled milestone review. AIR-1.6 will provide a proposal and cost estimate for the products and services required and assign an ESOH Coordinator to the task.

15.43 POC: Herman Varmall, Environmental Programs, AIR-1.6 (301) 757-2155

## CHAPTER XV: OTHER KEY TOPICS

### PART G: CORE LOGISTICS CAPABILITIES, TITLE 10 US. CODE, SECTION 2464

15.44 Purpose. The statutory requirement for “core” depot-level maintenance and repair capability has been in place since the early 1980s, but has gained greater recognition since the release of more precise language in November 1997. Depot-level maintenance and repair workloads are much more desirable to the private sector now than ever before, due primarily to fewer “new start” programs, the Government’s desire to use innovative contracting approaches, and the private sector’s need to diversify. Core represents the minimum amount of maintenance/repair capability that the DoD Components must maintain in organic depot facilities to ensure contingency operations are not compromised because of lack of essential depot-level repair support.

#### 15.45 Discussion

15.45.A Title 10, U. S. Code, Section 2464, Core Logistics Capabilities, requires DoD to maintain a core logistics capability that is Government-owned and Government-operated (including Government personnel and Government-owned and operated equipment and facilities) to ensure a ready and controlled source of technical competence and resources necessary to ensure effective and timely response to a mobilization, national defense contingency situations, and other emergency requirements.

15.45.B Exclusions are defined as systems and equipment under special access programs, nuclear aircraft carriers, and commercial items or commercial items with minor modifications to meet Federal Government requirements. Additionally, consideration is given to existing capability that resides within DoD.

15.45.C The statute states that core capabilities identified must include those capabilities necessary to maintain and repair the weapon systems and other military equipment identified to fulfill the strategic and contingency plans prepared by the Chairman of the Joint Chiefs of Staff (including establishment of an organic depot maintenance capability no later than four years after initial operational capability (IOC)).

15.45.D To comply with statutory requirements, NAVAIR applies a methodology prescribed by DoD to determine core capability requirements and the workloads required to sustain that capability. The core determination and workload quantification stems from the weapon systems identified to support the latest JCS planning scenario(s); whether statutory exclusions are applicable; if capability exists within DoD; as well as a computation that results in a quantity of core-sustaining workload.

15.45.E Simply stated: Core is capability; capability consists of the skills/artisans, equipment, and facilities needed to accomplish the maintenance and repair; and specific workload sustains that capability by exercising the artisans’ skills and confirming the availability of specialized equipment, tooling, and facilities.

15.45.F It’s important for acquisition program officials to consider the outcome of the core analysis to ensure compliance with statutory requirements and because the core or non-core determination has a bearing on the maintenance support concept and follow-on budget exhibits. For these reasons, it’s imperative that the core analysis be performed in the early stages of an acquisition program’s life cycle to preclude impediments to the program’s progress later on. Additionally, the core determination is required as input to the Depot Maintenance Interservice (DMI) submission and included in the ILA checklist. Disregard for the Title 10 requirements could impact the approval to proceed to the next milestone.

15.46 POC: Nancy Turner, AIR-6.1.1.2, (301) 757-8611 or (301) 757-8714

## CHAPTER XV: OTHER KEY TOPICS

### PART H: CLINGER-COHEN COMPLIANCE AND NAVAIR IT APPROVAL PROCESS

15.47 Background. In 1996, Congress enacted the Clinger-Cohen Act (CCA), requiring agencies to use a disciplined capital planning and investment control process to acquire, use, maintain and dispose of information technology. Per CCA, OSD Memo of 08 Mar 2002, the DoD 5000.2 of 12 May 2003, and SECNAVINST 5000.2D, CCA compliance is required for all programs that contain IT, including IT in weapons and weapons systems programs. The law provides authority to the agency's Command Information Officer (CIO) to manage IT resources effectively. The authority to grant compliance with CCA and approve the Information Assurance strategy depends on the Acquisition Category (ACAT). NAVAIR has established a Center of Excellence (COE) to assist programs in achieving CCA compliance. For more information, visit the Clinger-Cohen Center of Excellence at <https://mynavair.navair.navy.mil/CIO>.

- ACAT Mission Critical/Mission Essential (MC/ME) programs that contain IT must be:
  - CCA compliant to achieve milestone
  - CCA compliant prior to contract award
  - CCA compliant to expend funds by registering programs in the DoD IT repository (DITPR-DON)
- For non-MC/ME programs that contain IT, the PM has been delegated CCA compliance authority per the SECNAVINST 5000.2D

15.48 Primary Purpose. To streamline IT acquisitions and emphasize life cycle management of IT as a capital investment. The key reasons for enacting CCA were to:

- Give IT procurement authority back to agencies
- Eliminate the Federal Information Resources Management Regulation (FIRMR) which governed acquisition and management of FIP (computer and telecommunications) resources
- Move the General Services Board of Contract Appeals authority to hear bid protests on IT contracts to the General Accounting Office (GAO)
- Encourage incremental acquisition of IT systems
- Encourage the acquisition of commercial off the shelf (COTS) IT products
- Allow the Administrator for Federal Procurement Policy to conduct pilot programs in Federal agencies to test alternative approaches for acquisition of IT resources

15.49 Risks. Associated risks include:

- Milestone Decision Authority (MDA) can refuse to grant a milestone or major decision for a program
- Withhold or loss of funding
- Loss or delay of contract award and/or schedule delays

15.50 Key IT management actions

- Design and implement an IT management process for maximizing the value and assessing and managing the risks of the IT acquisitions
- Integrate the IT management process with the processes for making budget, financial, and program management decisions
- Establish goals for improving the efficiency and effectiveness of agency operations and, as appropriate, the delivery of services to the public through the effective use of IT, and prepare an annual report, to be included in the agency's budget submission to Congress, on the progress in achieving the goals
- Ensure performance measurements are prescribed for IT by, or to be acquired for, the agency, and that they measure how well the IT supports the agency programs
- Appoint a Command Information Officer (at NAVAIR this position (AIR-7.0A) is currently vacant)

- Inventory all computer equipment and maintain an inventory of any such equipment that is excess or surplus property

15.51 Definition of Information Technology (IT). Any equipment, or interconnected system or subsystem of equipment, that is used in the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information.

The term "equipment" means any equipment used by a Component directly or used by a contractor under a contract with the Component that requires the use of such equipment or the use, to a significant extent, of such equipment in the performance of a service or the furnishing of a product.

The term "IT" includes computers, ancillary equipment (including imaging peripherals, input, output, and storage devices necessary for security and surveillance), peripheral equipment designed to be controlled by the central processing unit of a computer, software, firmware and similar procedures, services (including support services), and related resources. The term "IT" also includes National Security Systems (NSSs). It does not include any equipment that is acquired by a Federal contractor incidental to a Federal contract.

15.52 Application. The CCA applies to all federal executive agencies and all software-intensive domains. It applies to and combines automated information systems, command, control (C2), communications (C3), computer (C4), and intelligence (C4I) systems and embedded systems.

15.53 To ensure CCA compliance requirements do not impact program schedules, it is vital to program planning to include adequate CCA review and processing time, no less than 120 days (30 days NAVAIR CIO Office review, 90 days DON CIO and DASN Space & C4I review), to obtain CCA compliance certification/confirmation. Milestone Approvals cannot occur and contract awards cannot be made without confirmation/certification of CCA compliance. In order to comply with the Clinger-Cohen Law of 1996, a Program must be able to reference the acquisition documentation that meets each of the eleven elements in the CCA Table. To assist Program Managers in achieving compliance with the eleven elements of CCA, NAVAIR Office of CIO, Information Resources Management Division, established the CCA Center of Excellence (COE). CCA compliance is required for all programs that contain IT, including IT in weapons and weapons systems programs and all NSS programs. The CCA COE personnel meet with clients to determine CCA requirements. The CCA COE reviews all existing acquisition documentation to identify where the 11 elements of CCA are addressed and develop the Information Assurance Strategy. COE personnel also ensure that each area of DCIO responsibilities are addressed. In compliance with the Appropriations Act, the COE staff enters the program's critical information in the Department of Defense (DoD) Information Technology (IT) Portfolio Repository – Department of the Navy (DITPR-DON) database.

The CCA COE develops NAVAIR CIO-endorsed compliance packages in 32 business days. The COE has achieved a 64 percent reduction in cycle time for a NAVAIR CIO endorsed confirmation packages.

15.54 Responsibility for IT Oversight. Responsibility for Information Technology (IT) oversight is delineated in DoDI 5000.2, subj: Operation of the Defense Acquisition System, Encl 4 (IT Considerations) and SECNAVINST 5000.2D, subj: Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System, Encl 4 (IT Considerations).

15.55 NAVAIR Responsibility for IT Management, Approval, and Oversight of IT Acquisitions. NAVAIR Office of CIO has been tasked with ensuring all IT procurements, including IT in weapons systems, comply with NAVAIR, DoD, DON and Navy statutory and regulatory requirements. The IT Approval process is a fee-based service provided by NAVAIR Office of CIO to ensure compliance in the areas of security, enterprise architecture, FAM, NMCI, IT Budget, Legacy Server Transition/Consolidation, CCA, DITPR-DON and Web Enablement.

In 2007, the NAVAIR Office of CIO released an automated, Web-based version of the IT Approval/ IT Spend Plan forms. Located on the NAVAIR Office of CIO Community of Interest within MyNAVAIR, this tool offers numerous enhancements including a shorter processing time, electronic workflow, e-mail notifications, electronic signature, and a customized dashboard showing real-time status of packages in review and packages that have been approved. The automated IT Approval tool is mandatory beginning 1 October 2007, after which time no paper

copies will be accepted. All questions related to the automated IT Approval tool should be directed to the NAVAIR National Help Desk at 301-342-3104 or 888-292-5919.

IT Approval can be obtained in three ways:

- IT Approval form submitted for procurement of an individual product or service.
- IT Spend Plan submitted for annual consolidated projected IT procurements. *IT Spend Plans are the recommended approach because they reduce numerous individual IT Approvals.*
- “Speed Pass” Clinger Cohen Confirmation (embedded/platform IT only). Platform/embedded IT procured by a CCA compliant program will be exempt from the IT Approval process. The NAVAIR Office of CIO will check for CCA confirmation verification.

#### 15.55.A Risks.

- Contracts will not process IT-related procurements without NAVAIR Office of CIO IT Approval.
- Lack of IT Approval may result in withholding or loss of funding, loss or delay of contract award and schedule delays until the program has obtained approval.
- Lack of IT Approval may result in disconnection from the Navy network environment.

15.55 B Instruction for Obtaining IT Approval. The automated IT Approval/IT Spend Plan tool, including all supporting documentation and user information, is located on the NAVAIR Office of CIO Community of Interest within MyNAVAIR: <https://mynavair.navair.navy.mil/CIO>.

15.55.C IT Approval Fee. On 15 Nov 2004, the Council of Competencies and Business Units (CCBU) and Council of Program Executive Officers (CPEO) agreed that NAVAIR Office of CIO support functions are a critical part of the acquisition process in order to ensure all IT programs and capabilities meet Federal, DoD, and DON legal and regulatory requirements. As such, the CCBU/CPEO approved a model to fund the IT Approval Process portion of CIO functions as a fee-for-service.

### **Exemptions**

The following types of procurements are exempt from the IT Approval fee in FY08; ***however, Program Managers are still required to submit the procurement through the IT Approval process:***

- Procurements less than \$3,000
- Procurements funded with CPP and NAWCAD NWCF overhead funds

15.55.D IT Approval Authority Thresholds and Points of Contact. NAVAIR CIO has delegated IT Approval authority to local IT POCs at each site for up to \$25,000. A current listing of Site IT POCs is available on the NAVAIR Community of Interest within MyNAVAIR at <https://mynavair.navair.navy.mil/CIO>. All site IT Approval requests shall be submitted through the automated IT Approval tool. Furthermore, Deputy CIO for IRM staff will review and approve all IT-related procurements entered in Navy ERP.

#### 15.56 Most Important Items to Remember.

15.56.A The Program Manager is responsible for submitting either an IT Spend Plan (Consolidated, Yearly Procurement Review) or an Individual IT Approval form (Individual Procurement Review) for NAVAIR Office of CIO review. IT POCs and Contracting Officers should ensure all IT procurements have proper IT Approval and any IT-related contract should not be executed without proper IT Approval. All Individual Work Plans (IWP) requests containing IT-related support services should not be approved without proper IT Approval. If a contract contains IT resources (computer hardware, software, hardware maintenance, support services or telecommunications) it **MUST** receive IT Approval prior to contract award. Failure to do so will result in the illegal award of an IT contract.

15.56.B Prior to awarding an IT contract, Program Manager should ensure NAVAIR does not have an enterprise software license in place. An enterprise license is a signed contract with a software vendor that provides NAVAIR with a vehicle to acquire deeply discounted software. Please visit the DOD/DoN web site at <http://www.it-umbrella.navy.mil> or <http://www.esi.mil>.

15.56.C Per ASN directive of 19 Oct 00 (also available on the NAVAIR Office of CIO web site), IT contracts valued at \$250K or greater cannot be awarded without prior review/approval by a Flag/SES rank individual or his/her designated delegate.

15.57 POC: Information Resources Management Office, [NAVAIR\\_IRM@navy.mil](mailto:NAVAIR_IRM@navy.mil).

## CHAPTER XV: OTHER KEY TOPICS

### PART I: PERFORMANCE BASED SERVICE ACQUISITION (PBSA)

#### 15.58 Source Documents:

Public Law 106-398, section 821

FAR 2.101, 37.6, 7.105, 46.103, and 46.401(a)

Seven Steps to Performance Based Service Acquisition: [http://www.acqnet.gov/comp/seven\\_steps/index.html](http://www.acqnet.gov/comp/seven_steps/index.html)

#### 15.59 Discussion

15.59.A Performance-Based Service Acquisition (PBSA) has been articulated in regulation, guidance, and policy for over two decades. Progress in implementing PBSA, also known as Performance-Based Service Contracting and Performance-Based Contracting, has been slow. DoD is committed to achieving broader use of PBSA and has established a goal of 50 percent of eligible service contract dollars by FY 2005.

15.59.B Several GAO and DODIG audits of the manner in which services are procured throughout the Government have identified shortcomings. These shortcomings include poor planning, inadequately defined requirements, inadequate competition, and lax Government oversight of contractor performance. Performance-based service contracts are widely believed to provide one significant means to address these inadequacies. Increased PBSA should result in benefits to the Government through savings in acquisition costs, savings in Government oversight costs, and/or improved contractor performance.

15.59.C Performance-based contracting methods are intended to ensure that required performance quality levels are achieved and that total payment is related to the degree that services performed meet contract standards

15.59.D With limited exceptions, when acquiring services, agencies must use performance-based contracting methods to the maximum extent practicable and use the following order of precedence with respect to contract type:

- a) A firm-fixed price performance-based contract or task order;
- b) A performance-based contract or task order that is not firm-fixed price; and
- c) A contract or task order that is not performance-based.

15.59.E In July 2003, the Office of Federal Procurement Policy (OFPP) issued a report of an interagency task force that reviewed PBSA with a view toward identifying impediments to its increased use. The report recommended several changes to the FAR and improved quality and availability of guidance. The most frequently cited barriers to converting from non-performance based service contracts to performance-based include the difficulty of converting statements of work, lack of measurable performance standards, and the lack of quality assurance surveillance plans (QASP).

15.59.F Both OFPP and DoD encourage greater use of Statements of Objectives (SOO) as one means to increase PBSA. Utilization of a SOO allows program personnel to summarize their requirements, identify constraints, and request that offerors submit not only a performance-based solution, but also a set of metrics and a QASP. Thus the essential, interrelated building blocks of a performance based service contract become outputs of the competitive acquisition process.

15.59.G DoD has recognized that a key component for increasing PBSA is to ensure that requirements personnel understand how to prepare performance based specifications. Toward that end, the Defense Acquisition University (DAU) offers Continuous Learning Courses (CLC) Acquisition of Services (CLC 014) and Performance Based Services Acquisitions (CLC 013). See <https://learn.dau.mil/html/clc/Clc.jsp>. In addition, OFPP maintains the "Seven Steps to Performance Based Services Acquisition" [http://www.acqnet.gov/comp/seven\\_steps/index.html](http://www.acqnet.gov/comp/seven_steps/index.html), a virtual guide for the greater "acquisition community," including the program managers, program staff, customers, and others whose participation is vital to a successful performance-based acquisition. It is also a knowledge management tool that captures and connects the web of information on the

Internet into seven critical, strategic steps of performance-based acquisition. Check out the “Library” for guidance and links to samples and examples.

15.60 POC: AIR-2.1.1.1, (301) 757-6571

## CHAPTER XV: OTHER KEY TOPICS

### PART J: MANAGEMENT AND OVERSIGHT PROCESS FOR THE ACQUISITION OF SERVICES (MOPAS)

#### 15.61 Background

15.61A Section 801 of the FY02 National Defense Authorization Act (NDAA) required DoD to develop a management structure for the acquisition of services comparable to the management structure applicable to the acquisition of products. OSD (AT&L) memo of 31 May 02 and DASN(ACQ) memo of 10 March 03, subject “Acquisition of Services,” fulfilled this requirement. The Navy management structure is designated the “DoN Management and Oversight Process for the Acquisition of Services (MOPAS)”.

15.61B Section 812 of the FY06 NDAA again required USD(AT&L) to issue policies, procedures, and best practices for acquisition planning; solicitation and contract award; requirements development and management; contract tracking and oversight; performance evaluation and risk management associated with the acquisition of services.

15.61C. OSD (AT&L) memo of 2 Oct 06 imposed on the military services this new congressional mandate, updating and superseding its 31 May 02 policy. DASN(ACQ) memo of 1 Dec 06 updated and re-issued the DoN Management and Oversight Process for the Acquisition of Services (Revised) (MOPAS 2). The DoN MOPAS 2 retained the existing acquisition management structure of the original DoN MOPAS issued in 2003. The DoN MOPAS 2 is implemented by AIR-1.0 memo of 17 May 07, NAVAIR Management and Oversight Process for the Acquisition of Services (Revised) (NAVAIR MOPAS 2). In general, MOPAS policy requires an acquisition planning document, often referred to as a MOPAS Acquisition Strategy (AS), for all acquisitions of services exceeding \$100K except that the DoN MOPAS 2/NAVAIR MOPAS 2 do not apply to major and non-major defense acquisition and information technology programs that are managed and reviewed under DoD/DoN 5000 series documents. The OSD 2 Oct 06 policy memo explicitly states that services acquisitions for such programs will be reviewed and approved within that (DoD/DoN 5000 series documents) management structure. Hence, a program’s services acquisitions should be planned within the program’s Acquisition Strategy and approved by the program’s Milestone Decision Authority.

15.61D SECNAVINST 5000.2D, Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System, incorporated the DoN MOPAS requirements into Chapter 8, Acquisition of Services.

15.62 Purpose. MOPAS is intended to ensure that the acquisition of services within DoN are strategic in nature, represent sound business practices, and comply with applicable laws, regulations, directives, and other requirements. A major objective is to promote performance based services acquisitions (see Chapter XIV, Part I of this Guide) on a broader scale for small dollar value services acquisitions that are not a part of a major program. As such, DoD excluded services acquisitions that are managed as part of a weapon acquisition program or an automated information system being reviewed and approved under DoDI 5000.2 from complying with the detailed requirements of the MOPAS policy.

#### 15.63 Discussion

15.63.A MOPAS’ major requirement is to develop an acquisition strategy document for non-program services acquisitions—this document is scalable based on the magnitude of the acquisition. Post award requirements are to ensure identification of these purchases (for review) and to ensure oversight of contractor performance through execution reviews. These three facets are basic to all acquisitions; however, numerous DoD IG and GAO reviews had reported inadequacies, thus precipitating the repeated imposition of statutory requirements noted above.

15.63.B The approval requirements contained in the FY02/06 NDAA were implemented in the DFARS and the Navy Marine Corps Acquisition Regulation Supplement NMCARS. However, continuing irregularities

occurring when non-DoD activities were used to procure on DoD's behalf resulted in another statutory mandate, in the FY05 NDAA, for high-level approvals to use non-DoD contracts. This mandate was the subject of a 29 Oct 04 USD(AT&L) and DoD comptroller joint memo, and on 20 Dec 04, a similar joint ASN(RD&A) and ASN(FM&C) memo on the proper use of non-DoD contracts. These memos require every acquisition of services using non-DoD contracts to be examined and approved on a case-by-case basis. NAVAIRINST 4200.10 of 28 July 06 contains NAVAIR's procedures (see <https://mynavair.navair.navy.mil>, under Library and Research, Instructions and Notices). In order to take advantage of an existing process, it uses the Economy Act (EA) Determination and Findings process contained in NAVAIRINST 7030.5D for those services acquisitions falling under the authority of that Act. It further establishes an approval process modeled on the existing EA process for those services acquisitions not falling under the Economy Act.

15.64 POC: Cognizant program contracting officer or AIR-2.1.1, (301) 757-6571.

# CHAPTER XV: OTHER KEY TOPICS

## PART K: TWO PASS/ SIX GATE PROCESS

### 15.65 Source Documents:

DODD 5000.1

DoDI 5000.2

SECNAVINST 5000.2

SECNAVINST 5420.188F

Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01F, Joint Capabilities Integration and Development System, of 1 May 2007

Chairman of the Joint Chiefs of Staff Instruction 3170.01F, Joint Capabilities Integration and Development System, of 1 May 07

Vice Chief of Naval Operations Memorandum 5420N09, Resources and Requirements Review Board (R3B) Charter of 23 Mar 06

Commandant of the Marine Corps (CMC) Policy Memorandum 1-02, Marine Requirements Oversight Council (MROC) of 17 Jan 02

Under Secretary of Defense (AT&L) Memorandum, Configuration Steering Boards, of 30 Jul 07

Under Secretary of the Air Force Document, National Security Space Acquisition Policy 03-01, of 27 Dec 04

Goldwater-Nichols Department of Defense Reorganization Act of 1986, PL 99-433, of 1 Oct 86

### 15.66 Purpose

The Department of the Navy (DoN) Requirements and Acquisition Process Improvements establishes a review process to improve governance and insight into the development, establishment, and execution of acquisition programs in the DoN. The goal of the review process is to ensure alignment between Service-generated capability requirements and acquisition as well as improving senior leadership decision-making through better understanding of risks and costs throughout a program's development cycle. The Acquisition Process Improvements establishes a disciplined and integrated process for requirements and acquisition decision-making within DoN. It will endorse or approve key Joint Capabilities Integration and Development System (JCIDS) and acquisition documents, and facilitate decisions regarding required navy and Marine Corps capabilities and acquisition of corresponding materiel solutions.

### 15.67 Discussion

The process will be implemented in an integrated, collaborative environment that includes participation by appropriate elements from the Office of the SECNAV, the Office of the CNO (OPNAV), the Headquarters Marine Corps (HQMC), and activities involved in developing JCIDS and acquisition documents.

This applies to all pre-Major Defense Acquisition Program (MDAP) programs, all MDAP (Acquisition Category (ACAT) I) programs, all pre-Major Automated Information System (MAIS) programs, all MAIS (ACAT IA) programs, and selected ACAT II programs. The Gate reviews themselves and Service milestone Program Decision Meetings (PDMs) or Program Reviews (PR) should be combined when appropriate as determined by the Secretary of the Navy (SECNAV), Chief of Naval Operations (CNO), Commandant of the Marine Corps (CMC) or designee. If Gate reviews and PDMs or PRs are combined, the acquisition requirements including statutory and regulatory documentation, shall be satisfied and an Acquisition Decision Memorandum shall be issued by the Milestone Decision Authority.

### 15.68 Gate Review Process

Pass 1. Pass 1 is led by CNO or CMC, and encompasses three requirements Gates. Pass 1 includes Gates 1, 2, and 3. Pass 1 is a process that starts prior to Concept Decision (CD) continues through the Concept Refinement Phase, and ends after Gate 3. All Pass 1 Gate reviews will review program health for satisfactory cost, risks, and budget adequacy.

Pass 2. Pass 2 is led by the Component Acquisition Executive, and encompasses three acquisition Gates. Pass 2 includes Gates 4, 5, and 6. Pass 2 starts after Gate 3 and ends after Milestone B during the initial portion of the System Development and Demonstration (SDD) Phase. Follow-on Gate 6 reviews will occur during the SDD and Production and Deployment Phases. All Pass 2 Gates reviews will review program health for satisfactory cost, risks, and budget adequacy.

#### 15.69 Responsibilities

All DoN organizations shall ensure successful achievement of all DoN Requirements/Acquisition Gates for all pre-MDAP, pre-MAIS, ACAT I, IA, and selected ACAT II programs.

#### 15.70 Source Guidance

Guidance on DoN Requirements and Acquisition Process Improvements can be found in SECNAVNOTE 5000, dated 26 February 2008.

15.71 POC: Lola Scott, AIR-1.1, (301) 757-7228

## LIST OF ABBREVIATIONS AND ACRONYMS

|                     |  |
|---------------------|--|
| A&AS                | Advisory and Assistance Services   |
| AAP                 | Abbreviated Acquisition Program  |
| ACAT                | Acquisition Category   |
| ACO                 | Administrative Contracting Officer   |
| ADM                 | Acquisition Decision Memorandum  |
| AEPST               | Acquisition Environmental Product Support Team                                       |
| AKSS                | Acquisition Knowledge Sharing System   |
| AL                  | Acquisition Logistics (formerly Integrated Logistics Support)                        |
| ALH                 | Acquisition Logistics Handbook (ALH)   |
| ALSP                | Acquisition Logistics Support Plan   |
| AM                  | Acquisition Manager  |
| AMPS                | Afloat Master Planning System  |
| AOA                 | Analysis of Alternatives   |
| AP                  | Acquisition Plan   |
| APBA                | Acquisition Program Baseline Agreement   |
| APEO                | Assistant Program Executive Officer  |
| APEO (SE)           | Assistant Program Executive Officer (Systems and Engineering )                       |
| APEO(L)             | Assistant Program Executive Officer (Logistics )                                     |
| APEEO (RDT&E)       | Assistant Program Executive Officer (Research, Development, Test & Evaluation)       |
| APM                 | Assistant Program Manager  |
| APMC                | Assistant Program Manager for Contracts  |
| APML                | Assistant Program Manager for Logistics  |
| APMSE               | Assistant Program Manager for Systems & Engineering                                  |
| APMT&E              | Assistant Program Manager for Test & Evaluation                                      |
| APN                 | Aircraft Procurement, Navy   |
| ARB                 | Acquisition Review Board   |
| ASD(NII)            | Assistant Secretary of Defense for Networks & Information Integration                |
| ASN(FM&C)           | Assistant Secretary of the Navy (Financial Management & Comptroller)                 |
| ASN(RD&A)           | Assistant Secretary of the Navy (Research, Development & Acquisition)                |
| ASN (RD&A)<br>CHENG | Assistant Secretary of the Navy (Research, Development & Acquisition) Chief Engineer |
| ASP                 | Assurance Surveillance Plan  |
| ASPO                | Acquisition Systems Protection Officer   |
| ASPP                | Acquisition Systems Protection Program   |
| ASPRO               | Acquisition Systems Protection Officer   |
| ASR                 | Acquisition Strategy Report  |
| ASSIST              | Acquisition Streamlining & Standardization Information System                        |
| ASW                 | Anti-Surveillance Warfare  |
| A&AS                | Advisory and Assistance Services   |
| BAFO                | Best & Final Offer   |
| BES                 | Budget Estimate Submission   |
| BF                  | Battle Force   |
| BFI                 | Battle Force Interoperability  |
| BFIT                | Battle Force Interoperability Test   |
| BGSIT               | Battle Group System Integration Test   |
| BOA                 | Basic Ordering Agreement   |
| BRAC                | Base Relocation & Closure  |
| BRB                 | Baseline Review Board  |
| BSE                 | Battlespace Systems Engineering  |
| CAE                 | Component Acquisition Executive (same as SAE)  |
| CAIV                | Cost as an Independent Variable  |
| CAO                 | Competency Aligned Organization  |

|             |   |
|-------------|---|
| CARS        | Consolidated Acquisition Reporting System   |
| CBD         | Commerce Business Daily   |
| CBT         | Computer Based Training   |
| CCB         | Change Control Board or Configuration Control Board   |
| CDD         | Capability Development Document   |
| CDRL        | Contract Data Requirements List   |
| CE          | Concept Exploration   |
| CEC         | Cooperative Engagement Capability   |
| CFSG        | Contracting for Supportability Guide  |
| CI          | Configuration Items   |
| CI          | Counterintelligence   |
| CICA        | Competition in Contracting Act  |
| CJCS        | Chairman of the Joint Chiefs of Staff   |
| CHCSI       | Chairman of the Joint Chiefs of Staff Instruction   |
| CHCSM       | Chairman of the Joint Chiefs of Staff Manual  |
| CLIN        | Contract Line Item  |
| COMOPTEVFOR | Commander, Operational Test and Evaluation Force  |
| CM          | Configuration Management  |
| CMC         | Commandant of the Marine Corps  |
| CNO         | Chief of Naval Operations   |
| CMMI        | Capability Maturity Model (Integrated)  |
| COAL        | Common Operational Activities List  |
| CONOPS      | Concept of Operations   |
| COP         | Communities of Practice   |
| COTS        | Commercial-Off-the-Shelf  |
| CPD         | Capability Production Document (formerly part of Operational Requirements Document (ORD))               |
| CRD         | Capstone Requirements Document  |
| CS          | Consulting Services   |
| CSA         | Command/Staffs/Agencies   |
| CSFL        | Common Systems Function List  |
| CTL         | Component Team Leader   |
| C4I         | Command, Control, Communications, Computers, and Intelligence   |
| C4ICS       | C4I Combat Systems  |
| C4ISP       | C4I Support Plans   |
| C4ISR       | C4I Support and Reconnaissance  |
| D&F         | Determination and Findings  |
| DAB         | Defense Acquisition Board   |
| DAD         | Defense Acquisition Deskbook  |
| DAE         | Defense Acquisition Executive (the Under Secretary of Defense for Acquisition, Technology, & Logistics) |
| DASN        | Deputy Assistant Secretary of the Navy  |
| DCMA        | Defense Contracts Management Agency   |
| DCNO        | Deputy Chief of Naval Operations  |
| DEP         | Distributed Engineering Board   |
| DER         | Data Exchange Requirement   |
| DFAR        | Defense Federal Acquisition Regulations   |
| DID         | Data Item Description   |
| DISA        | Defense Information System Agency   |
| DMI         | Depot Maintenance Interservice  |
| DMR         | Defense Management Report   |
| DNET        | Defense Network   |
| DOD         | Department of Defense   |
| DODAF       | Department of Defense Architecture Framework  |
| DON         | Department of the Navy  |
| DOT&E       | Director, Operational Test & Evaluation   |

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| DPG    | Defense Planning Guidance  |
| DPRO   | Defense Plant Representative Office                                    |
| DRB    | Defense Resources Board/Design Review Board                            |
| DRPM   | Direct Reporting Program Manager                                       |
| DRRB   | Data Requirements Review Board   |
| DSMC   | Defense Systems Management College                                     |
| DT&E   | Development Test & Evaluation  |
| ECP    | Engineering Change Proposal  |
| EDT    | Externally Directed Teams  |
| EMD    | Engineering & Manufacturing Development (also E&MD)                    |
| EMI    | Electromagnetic Interference   |
| EO     | Executive Order  |
| EOB    | Expense Operating Budget   |
| ET     | Enterprise Team  |
| EVMS   | Earned Value Management System   |
| FAR    | Federal Acquisition Regulations  |
| FMS    | Foreign Military Sales   |
| FOT&E  | Follow On Test & Evaluation  |
| FPI    | Fixed Price Incentive  |
| FRP    | Full Rate Production   |
| FRR    | Flight Readiness Reviews   |
| FSED   | Full Scale Engineering Development (also FSD - Full Scale Development) |
| FST    | Fleet Support Team   |
| FYDP   | Future Year Defense Program  |
| F3I    | Form, Fit, Function Interface  |
| GFE    | Government Furnished Equipment   |
| GSE    | Ground Support Equipment   |
| HAZMAT | Hazardous Material   |
| HMMP   | Hazardous Materials Management Program                                 |
| HQMC   | Headquarters Marine Corps  |
| HRC    | Human Resources Center   |
| HSI    | Human-System Integration   |
| IBR    | Integrated Baseline Review   |
| ICD    | Initial Capabilities Document (formerly Mission Need Statement (MNS))  |
| IDP    | Individual Development Plan  |
| IEPR   | Independent Expert Program Review                                      |
| IER    | Information Exchange Requirement                                       |
| ILA    | Independent Logistics Assessment                                       |
| IMIP   | Industrial Modernization Incentives Program                            |
| IOC    | Initial Operating Capability   |
| IOCSR  | Initial Operating Capability Supportability Review                     |
| IPPD   | Integrated Product and Process Development                             |
| IPR    | Interdepartmental Purchase Request                                     |
| IPS    | Integrated Program Summary   |
| IPT    | Integrated Program Team/Integrated Product Team                        |
| ISP    | Information Support Plan   |
| IT     | Information Technology   |
| ITIPS  | Information Technology Investment Planning Systems                     |
| J&A    | Justification & Approval   |
| JCIDS  | Joint Capabilities Integration & Development System                    |
| JCPAT  | Joint C4I Program Assessment Tool                                      |
| JITC   | Joint Interoperability Test Command                                    |
| JROC   | Joint Requirements Oversight Council                                   |
| KM/DS  | Knowledge Management/Decision Support                                  |
| KPP    | Key Performance Parameters   |

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| LEM        | Logistics Element Manager   |
| LMI        | Logistics Management Information  |
| LM         | Logistics Manager   |
| LMTCE-WIAT | Lead Maintenance Technology Center (Environment) – Working Integrated Product Team    |
| LRFS       | Logistics Requirements Funding Summary  |
| LRIP       | Low Rate Initial Production   |
| M&S        | Modeling & Simulation   |
| MCOTEA     | Marine Corps Operational Test & Evaluation Agency                                     |
| MDA        | Milestone Decision Authority  |
| ME         | Manufacturing Engineering   |
| MGFEL      | Master Government Furnished Equipment List  |
| MID        | Management Initiative Decision  |
| MILSTRIP   | Military Standard Requisitioning and Issue Procedures                                 |
| MIPR       | Military Interdepartmental Purchase Request   |
| MNAAPC     | Management of the Naval Aviation Acquisition Process Course                           |
| MNS        | Mission Need Statement  |
| MOPAS      | Management and Oversight Process for the Acquisition of Services                      |
| MS         | Milestone   |
| MSS        | Management and Professional Support Services  |
| NADEP      | Naval Aviation Depot  |
| NAE        | Navy Acquisition Executive  |
| NAIAO      | Naval Aviation Interoperability Assurance Office                                      |
| NAMP       | Naval Aviation Maintenance Procedure  |
| NAPS       | Navy Acquisition Procedures Supplement  |
| NAR        | Non-Advocate Review   |
| NAVCOMPT   | Navy Comptroller  |
| NAVICP     | Naval Inventory Control Point   |
| NAWC       | Naval Air Warfare Center  |
| NCR        | Naval Change Request  |
| NCTSI      | Navy Center for Tactical Systems Interoperability                                     |
| NCW        | Network Centric Warfare   |
| NDI        | Non-Developmental Item  |
| NEAT       | NAVAIR Environmental Acquisition Targets  |
| NEPA       | National Environmental Policy Act   |
| NFHP       | Navy Flying Hour Program  |
| NMCARS     | Navy Marine Corps Acquisition Regulation Supplement                                   |
| NPDM       | Navy Program Decision Meeting   |
| NSS        | National Security Systems   |
| NTP        | Naval Training System Plan  |
| NWCF       | Navy Working Capital Fund   |
| OASD       | Office of the Assistant Secretary of Defense  |
| ODS        | Ozone Depleting Substance   |
| O&MN       | Operations & Maintenance Navy (appropriation) (O&MNR is<br>O&M for the Naval Reserve) |
| OMB        | Office of Management and Budget   |
| OPN        | Other Procurement, Navy   |
| OPR        | Office of Primary Responsibility  |
| OPSEC      | Operations Security   |
| OR         | Operational Requirement   |
| ORD        | Operational Requirements Document   |
| OSD        | Office of the Secretary of Defense  |
| OSIP       | Operational Safety Improvement Program  |
| OT&E       | Operational Test & Evaluation   |
| OTRR       | Operational Test Readiness Review   |
| OUSD©      | Office of the Under Secretary of Defense (Comptroller)                                |
| PARM       | Participating Manager   |

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| PAT     | Process Action Team  |
| PBD     | Program Budget Decision  |
| PID     | Procurement Initiation Document  |
| PCO     | Primary Contracting Officer  |
| PDM     | Program Decision Memorandum  |
| PEO     | Program Executive Officer  |
| PESHE   | Programmatic Environmental, Safety, and Occupational Health Evaluation |
| PFCP    | Program Funding Change Proposal  |
| PHST    | Packaging, Handling, Storage, and Transportation                       |
| PID     | Procurement Initiation Document  |
| PM      | Program Manager  |
| PMA     | Program Manager AIR  |
| PMB     | Performance Measurement Baseline                                       |
| PMIS    | Program Manager Information System                                     |
| PPL     | Preferred Product List   |
| PPBS    | Planning, Programming, and Budgeting System                            |
| PO      | Project Order  |
| POM     | Program Objectives Memorandum  |
| POA&M   | Plan of Actions & Milestones   |
| PPA     | Procurement Planning Agreement   |
| PPBE    | Planning, Programming & Budgeting and Execution                        |
| PPBS    | Planning, Programming & Budgeting System                               |
| PPC     | Procurement Planning Conference  |
| PPP     | Program Protection Plan  |
| PPWSTPD | Plan for the Protection of Weapon Systems Test and Performance Data    |
| PRR     | Production Readiness Review  |
| PSP/TSP | Personal Software Process/Team Software Process                        |
| PST     | Product Support Team   |
| PT      | Procurement Team   |
| P2      | Pollution Prevention   |
| QA      | Quality Assurance  |
| QDR     | Quadrennial Defense Review   |
| QDR     | Quality Deficiency Report  |
| QPL     | Qualified Parts List   |
| RAMECS  | Rapid Action Minor Engineering Changes                                 |
| R&D     | Research and Development   |
| RCP     | Request for Contractual Procurement                                    |
| RDC     | Rapid Deployment Capability  |
| RDT&EN  | Research, Development, Test & Evaluation Navy (appropriation)          |
| RFI     | Request for Information  |
| RFM     | Requiring Financial Manager  |
| RFP     | Request for Proposal   |
| RM      | Requiring Manager  |
| R&M     | Reliability and Maintainability  |
| ROR     | Repair of Repairables  |
| RQ      | Requisition  |
| SA      | Supportability Analysis  |
| SAE     | Service Acquisition Executive  |
| SBIR    | Small Business Incentive Research                                      |
| SD&D    | System Development & Demonstration                                     |
| SE      | Systems Engineering  |
| SEI     | Software Engineering Institute   |
| SES     | Senior Executive Service   |
| SIPRNET | Secure Internet Protocol Network                                       |
| SIS     | Software Intensive System  |
| SLC     | System Leadership Council  |

|           |  |
|-----------|--|
| SLT       | Software Leadership Team   |
| SOF       | Statement of Functionality   |
| SOO       | Statement of Objectives  |
| SOW       | Statement of Work  |
| SPI       | Single Process Initiative  |
| SRR       | Systems Requirements Review  |
| SSA       | Source Selection Authority   |
| SSAC      | Source Selection Advisory Council  |
| SSEB      | Source Selection Evaluation Board  |
| SSEMP     | System Security Engineering Management Program   |
| SSIL      | System/Subsystem Interface List  |
| SSO       | Source Selection Officer   |
| SSP       | Source Selection Plan  |
| STARS     | Standard Accounting and Reporting System   |
| SW-CMM    | Software Capability Maturity Model   |
| SYSCOM    | Systems Command  |
| TAR       | TEMP Advisory Review   |
| TCD       | Target Configuration Date  |
| TDP       | Technical Data Package   |
| TDS       | Technical Directives   |
| TDSA      | Technical Directive Status Accounting  |
| TEIN      | Test and Evaluation Identification Number  |
| TEMP      | Test and Evaluation Master Plan  |
| TNS       | Technology Needs Survey  |
| TOA       | Total Obligation Authority   |
| TOR       | Trouble Observation Report   |
| TPWG      | Test Plan Working Group  |
| TR        | Trouble Report   |
| TYCOMs    | Type Commanders (Commander in Chief, U.S. Atlantic Fleet;<br>Commander in Chief, U.S. Pacific Fleet; and Commander in<br>Chief, U.S. Naval Forces, Europe) |
| USD(AT&L) | Under Secretary of Defense (Acquisition, Technology, & Logistics)  |
| VE        | Value Engineering  |
| VECP      | Value Engineering Change Proposal  |
| WBS       | Work Breakdown Structure   |
| WIPT      | Working Integrated Product Team  |
| WR        | Work Request   |
| WSPD      | Weapon System Planning Document  |