1 October 2013

NAVAIR ACQUISITION GUIDE 2014/2015

This is the 25th Edition of the NAVAIR Acquisition Guide. Constructive changes/recommendations are encouraged. POCs: Lola Scott, AIR-1.1 (**lola.scott@navy.mil**) or Florine James, AIR-1.1 (florine.james@navy.mil)

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

The NAVAIR Program Management Community Web Tool, available within the NMCI firewall at https://mynavair.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 Resources, and then the NAVAIR Acquisition Guide.

The Defense Acquisition Portal at https://dap.dau.mil/Pages/Default.aspx.

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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 "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 Enterprise are encouraged to use this Guide as a ready reference, and to make constructive comments for continual improvement to AIR-1.1, NAVAIR Acquisition Guide managing editor.

1.3. Acquisition Training

1.3.A. All personnel in designated Acquisition Technology and Logistics (AT&L) positions have a certification requirement. The certification requirement is determined by the position category and certification level assigned to the acquisition position based on the AT&L Workforce member's duties, responsibilities, and authorities. Individuals may also obtain certification in career fields other than that required by their position (Subsidiary career field certification). DoD publishes the certification standards annually in the on-line Defense Acquisition University

(DAU) Catalog at http://icatalog.dau.mil/ . These standards identify education, training, and experience requirements for the three levels of certification for each career field. The DAU Core Plus standards include both "Core" certification requirements for AT&L positions and "Plus" developmental education, training, and experience beyond that required for certification. Acquisition Workforce members must meet the certification requirements within 24 months of assignment. Once an acquisition workforce member is certified, he or she remains certified even if the certification requirements change. AT&L Career Field Certification is reciprocal among DoD Components. This means that DON certifications are recognized by other Defense Components. Registration for all DAU training is through Electronic Defense Acquisition Career Management (eDACM) at https://www.atrrs.army.mil/channels/navyedacm/Login/Login.aspx

1.3.B. Additionally, AT&L Workforce members must participate in meaningful Continuous Learning (CL) activities to remain current and proficient in their functional disciplines, AT&L policy initiatives and leadership and management skills. Acquisition community members must participate in at least 80 hours of CL activities bi-annually with a goal of participating in at least 40 hours annually. Workforce members are encouraged to coordinate with managers and supervisors to create a professional career developmental plan that will keep them informed of key initiatives in a rapidly-changing environment. The workforce member's continuous learning cycles will reset at the end of the 2-year period, not when the 80 point threshold is met. Continuous learning cycles are reset by the eDACM information system (formerly Register-Now). eDACM is the official system for tracking DON AT&L CL points. Continuous Learning points are self-reported by the Acquisition Workforce member and should be documented at https://www.atrrs.army.mil/channels/navyedacm/Login/Login.aspx. Note: Non-acquisition related or annual employee training requirements such as Prevention of Sexual Harassment, Retirement Planning Seminars/Workshops, safety drills, etc., are *not* applicable to the AT&L Continuous Learning Program and are *not* to be used for the 80-hour requirement.

1.3.C. Supervisors must ensure that AT&L Workforce members are provided an opportunity to complete certification or continuous learning courses, including distance learning, during duty hours. There is no tuition for DAU training for DoD employees. Travel and per diem funding for eligible Priority 1 and 2 students may be obtained via eDACM when the course is required for career field certification. Student's command funds Local Excess (Mileage) travel to a DAU campus subject to the availability of funds.

1.3.D. AIR-1.5 Defense Acquisition Workforce Improvement Act (DAWIA) POCs: DAWIA Program Director, DAU Liaison: Joe Wible 301-757-9013; Continuous Learning, Acquisition Workforce Tuition Assistance Program (AWTAP), Waivers, DAU Course Fulfillments Standard Operating Procedures: Heather Jacobs 301-342-4722; Section 852 Program Manager: Jennifer Altomare 301-995-7699; PM Career Field Training Education, and Certification: Mary Jo George 301-757-9008; Section 852 CL Funding and DAWIA Metrics: Nancy Wallace 301-757-7684.

CHAPTER II: NAVAL AVIATION ACQUISITION AND SUPPORT ORGANIZATION

2.1. Background. To understand how NAVAIR's acquisition processes operate, it is important to understand the 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. The 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 the transition to CAO/IPT. The following discussion synopsizes key events that significantly influenced the evolution and current organization structure, as well as NAVAIR's operating concepts over the last twenty 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 the Commander, Naval Air Systems Command's (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 Anti-Submarine Warfare (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, Secretary of the Navy Instruction (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 Systems Command (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 on 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 the 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, the IPT Manual of December 1996, and the NAVAIR CAO CONOPS of 25 August 2010. The two major thrusts of 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.

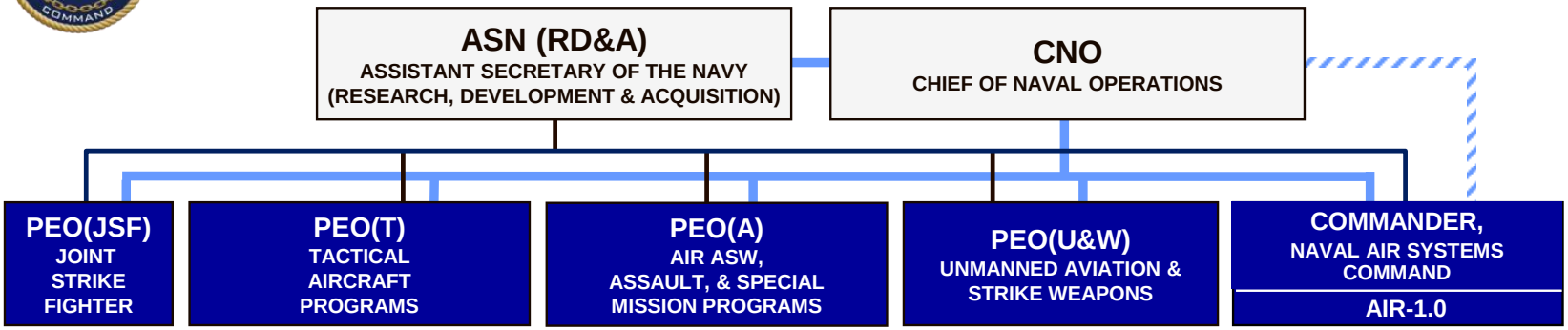
2.2. Teams. The heart of the CAO/IPT CONOPS is the operation of IPTs under the direction of the PMAs. The program managers, in their efforts to develop and deliver products, services, and support to our customers, now have control over their technical and supporting personnel at every site. These IPTs, 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 national competencies are: Program Management (AIR-1.0), Contracts (AIR-2.0), Research and Engineering (AIR-4.0), Test and Evaluation (AIR-5.0), Logistics and Industrial Operations (AIR-6.0), Corporate Operations (AIR-7.0), Comptroller (AIR-10.0) and the Office of Counsel (AIR-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. These charters 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.

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

NAVAL AVIATION
ACQUISITION PROGRAM ALIGNMENT



PEO(JSF) JOINT STRIKE FIGHTER

JOINT STRIKE FIGHTER (LIGHTNING II)

AIR-6.0

ACAT III

- NALDA/DECKPLATE
- JTDI
- JCMIS
- JEDMICS

PEO(T) TACTICAL AIRCRAFT PROGRAMS

PMA/PMW-101	MIDS JTRS Program Office
	MIDS JTRS
	MIDS LTV
	TTNT/CMN-4 LINK 16 Enhancements
PMA213	NAVAL AIR TRAFFIC MGMT SYSTEM
	JOINT PRECISION APPROACH & LANDING SYSTEM (NAVY LEAD)
	NAS MOD (USAF LEAD)
	MARK XIIA MODE 5 INTERROGATOR SYSTEM
	AN / UPX-29(V)
PMA231	C-2A GREYHOUND /
	E-2D AHE
	C-2A(R) SLEP
PMA234	AIRBORNE ELECTRONIC ATTACK
	EA-6B PROWLER
	EA-6B ICAP III
	ALQ-99 LBT
PMA251	AIRCRAFT LAUNCH & RECOVERY EQUIPMENT
	ADVANCED ARRESTING GEAR
	ELECTROMAGNETIC A/C LAUNCH SYSTEM
	SUSTAINMENT LIGHTING (SLS)
PMA257	A/V WEAPONS SYSTEMS
	AV-8B HARRIER
PMA259	AIR-TO-AIR MISSILE SYSTEMS
	SIDEWINDER
	AMRAMM
PMA265	F/A18 PROGRAM
	F/A-18A/B/C/D HORNET
	F/A-18 E/F SUPER HORNET
	ADV TFLIR
	ALR(V)3 ASR
	EA-18G AIRBORNE EA
	IRST
	DISTRIBUTED TARGETING SYSTEM
PMA271	AIRBORNE STRATEGIC COMMAND CONTROL AND COMMUNICATIONS
	E-6B MERCURY
PMA272	ADVANCED TACTICAL AIRCRAFT PROTECTION SYSTEMS
	ALR67(V)2 ADV SPECIAL RECEIVER
	AAR-47 MISSILE WARNING SYSTEM
	APR-39AV2 RADAR DETECTION SYSTEM
	INTEGRATED DEFENSE ELECTRONIC COUNTERMEASURES (IDECM)
	JTAS
	DoN LAIRCM
	ADVERSARY EA TRAINING PODS
	ASPJ
	AECM
	ALQ-126B, ALQ-144, ALQ-157, ALQ-167
	ALE-50 AAED/ALE-55 FOTD
PMA273	NAVAL TRAINING AIRCRAFT
PMA-298	FROM THE AIR PROGRAM OFFICE

PEO(A) AIR ASW, ASSAULT, & SPECIAL MISSION PROGRAMS

PMA207	TACTICAL AIRLIFT, ADVERSARY, and SUPPORT AIRCRAFT
	KC-130J, C/KC-130F/R/T, C-40A, C-9, C-12, UC-35, C-26, C-37, F-5, F-16, CAS
PMA261	H-53 HELICOPTERS
	CH/MH-53E SUPER STALLION
	CH-53K
PMA264	AIR ASW SYSTEMS
	SONOBUOYS AND SENSOR SYSTEMS
PMA274	EXECUTIVE TRANSPORT HELICOPTERS
	VXX, VH-3, VH-60
PMA275	MV-22, CV-22
PMA276	AH-1W SUPER COBRA
	UH-1N HUEY
	H-1 UPGRADES (AH-1Z, UH-1Y)
PMA290	MARITIME SURVEILLANCE AIRCRAFT
	EP-3E ARIES II
	P-3C ORION
	P-8A POSEIDON
PMA299	MH-60R
	MH-60S
	HH-60H
	SH-60B/F

ADVANCED SENSOR TECHNOLOGY PROGRAM OFFICE

PEO(U&W) UNMANNED AVIATION & STRIKE WEAPONS

PMA201	PRECISION STRIKE WEAPONS
	SDB II
	JDAM
	JSOW
	SLAM-ER
	HARPOON
	DIRECT ATTACK WEAPONS
	AAE/FC
	CAD/PAD
	ADVANCED DEVELOPMENT
PMA208	NAVY AERIAL TARGETS & DECOYS
	SUBSONIC AERIAL TARGETS
	SUPERSONIC AERIAL TARGETS
	FULL SCALE AERIAL TARGETS
	TA/AS; TTSP; TARGET CONTROL
PMA242	DIRECT AND TIME SENSITIVE STRIKE
	AARGM/HARM
	GUIDED/UNGUIDED ROCKETS
	JOINT AIR-TO-GROUND MISSILE
	AIRCRAFT GUN SYSTEMS
PMA262	MQ-4C TRITON
PMA263	SMALL TACTICAL UAS
	RQ-21A
	SURSS
	SHADOW
	T-HAWK
PMA266	MULTI-MISSION TACTICAL UAS
	MQ-8 FIRESCOUT
	TACTICAL CONTROL SYSTEM
PMA280	TOMAHAWK WEAPONS SYSTEM
PMA281	STRIKE PLANNING & EXECUTION SYSTEMS
	JMPS
	TMPC
PMA268	UCLASS
	UNMANNED COMBAT AIR SYSTEM CARRIER DEMONSTRATION (UCAS-D)

COMMANDER, NAVAL AIR SYSTEMS COMMAND

AIR-1.0

PMA202	AIRCREW SYSTEMS
	NAVY COMMON EJECTION SEAT (NACES)
	JT HELMET MOUNTED CUEING SYS (USAF LEAD)
	JOINT SERVICE AIRCREW MASK ROTARY WING (JSAM RW) (JPO (P) LEAD)
	JOINT SERVICE AIRCREW MASK FIXED WING (JSAM FW) (JPO (P) LEAD)
PMA205	AVIATION TRAINING SYSTEMS
	TACTICAL COMBAT TRAINING SYS, INCR I
	TACTICAL COMBAT TRAINING SYS, INCR I I
	TACTICAL TRAINING RANGES
PMA209	AIR COMBAT ELECTRONICS
	ADVANCED MISSION COMPUTER & DISPLAYS
	COMMON NAVIGATION SURVEILLANCE / AIR TRAFFIC MANAGEMENT
	TACTICAL A/C MOVING MAP CAPABILITY
	EMBEDDED GPS INERTIAL NAV SYS (EGI)
	GPWS CAT I (PATROL/TRANSPORT)/TAWS
	GPWS / CATEGORY III (HELOS)
	TERRAIN AWARENESS & WARNING SYST (TAWS II)
	MILITARY FLIGHT OPS QA (MFOQA)
PMA226	H-46
	FOREIGN MILITARY SALES
	TEST PILOT SCHOOL AIRCRAFT
PMA260	AVIATION SUPPORT EQUIPMENT CONSOLIDATED AUTOMATED SUPPORT SYSTEM (eCASS)
PMW/A170	NAVIGATION SYSTEMS AIR WARFARE (NAVWAR)

IN ADDITION: 10 ACAT IVs AND 53 AAPs

FLEET SUPPORT
PROGRAM MANAGEMENT
COORDINATION ON REQUIREMENTS AND RESOURCES

UPDATED: 11 SEP 2013
DATA SOURCE: PEO(T), GEOFF TISONE, 301-757-7156; PEO(A), CHRISTINE MCLELLAN, 301-757-5380; PEO(U&W), MALYNA SWYTER, 301-757-6306; AIR-1.0,THOMAS MATTHEWS, 301-757-6989; AIR-1.1, LOLA SCOTT, 301-757-7228

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
DoDI 5000.02 of 08 December 2008
Chairman of the Joint Chiefs of Staff Instruction 3170.01H of 10 January 2012
The Defense Acquisition Guidebook, promulgated November 2012
SECNAVINST 5000.2E of 1 September 2011
The DON Acquisition and Capabilities Guidebook SECNAV M-5000.2 of May 2012

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, dated 12 May 2003 and DoD Instruction 5000.02 subj: Operation of the Defense Acquisition System dated 08 December 2008 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 https://dap.dau.mil. This website is associated with the Office of the Secretary of Defense (OSD's) Acquisition, Technology, and Logistics (AT&L), Defense Acquisition Portal (DAP) is further described in the next chapter of this Guide. The Defense Acquisition Guidebook, provides discretionary best business practices as well as the supporting policies and statutes, and lessons learned. The Defense Acquisition Guidebook is available at https://acc.dau.mil/dag.

3.3.B. CJCS Instruction 3170.01H, subj: Joint Capabilities Integration and Development System, establishes the JCIDS policies and procedures. In addition, this instruction, and its accompanying CJCS Manual, subj: Operation of the Joint Capabilities Integration and Development System, dated 19 January 2012, 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 www.dtic.mil/cjcs/directives.htm

3.3.C. SECNAVINST 5000.2E, 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 5000.2E 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 https://dap.dau.mil/policy/Pages/overview.aspx (under the "DAP menu" titled "Policy", select "Filter by 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 DEFENSE ACQUISITION PORTAL (DAP)

4.1. Defense Acquisition Portal

4.1A. The **Defense Acquisition Portal (DAP)** replaced the AKSS (Acquisition Technology & Logistics Knowledge Sharing System) with a true portal that serves as a gateway to a vast array of knowledge related to the acquisition process, workforce and personnel development, policy, acquisition communities of practice, training and education, and an industry perspective. The DAP represents a new approach that leverages modern web technologies such as Really Simple Syndication (RSS) syndication techniques, blogs, tag clouds, and more to provide the workforce with 24/7 knowledge with greater ease and a higher level of confidence that the content comes from the most credible sources available. For example, the DAP now includes a Career Gateway area with content focused on individual career fields. The Certification Guide and Continuous Learning content is dynamically extracted from the Defense Acquisition University (DAU) iCatalog, Ask A professor content is shown for a given career field automatically based on relevance to that field, policy documents are displayed based on a tagging system that shows related items, the latest appropriate contributions from communities of practice are included, and blogs are part of each Career Gateway to provide a way for DAU Center Directors to communicate with the workforce. That is just one example of how advance web techniques have been integrated into the DAP. A significant number of additional advances are planned for the new two years.

4.1B. The **DAP front page** provides news, highlights, and a variety of quick links and a directory to allow users to quickly jump to key content inside of the DAP and beyond. Just to highlight a few items, there is a rotating Acquisition Today News service to provide quick access to featured updates on what is happening in the Acquisition Workforce, to highlight new policies, and to share other key information of value. The page also includes an Acquisition Reading resource, the link to the Career Field , and for users that have iGoogle pages there is even an initial service offering to place the DAP Quick Links as a gadget on an iGoogle portal. Icons at the top right of every page of the DAP allow users to add available RSS feeds to their own RSS aggregator(s) of choice  , to bookmark pages using most of the popular online social bookmarking tools  , or just to email  a helpful page to a colleague.

4.1C. The **Acquisition Process tab** is where much of the content from the old AKSS site actually resides now, but this area provides knowledge about the larger Big "A" Process, including the Joint Capabilities Integration and Development System; the Defense Acquisition System; and the Planning, Programming, Budgeting & Execution System. Links to those three areas can be found in the left hand navigation or by clicking on the appropriate rings on the page graphic. Like the front page, there is a rotating news feature that focuses specifically on Acquisition Process News, and as in the case in all of the tabs and sub areas on the DAP you will find related tools, videos and tutorials, applicable DAU and rapid deployment training, related websites, and more.

4.1D. The **Workforce tab** includes access to everything from information pertaining to current the Defense Acquisition Workforce Improvement Act (DAWIA) law to links to the Dapartment of Defense, Director Acquisition Career Management Component sites. Key sub areas under this tab include Workforce Development, Human Capital Initiatives, and Career Management.

4.1E. The **Policy tab** represents a significant enhancement over the old AKSS policy area. In addition to the rotating Policy news, the front page of this tab features key Acquisition Process and Service Policies, Recently Added Policy is highlighted, and related Rapid Deployment Training is linked. The left hand navigation of this tab provides a capability to view more than 1,500 policy documents or to filter them by a variety of categories under laws and regulations, organizations, career fields, or special topics. When viewing filtered policy, users will visibly see the type of file, the policy name, a document summary, and the published date before having to click on the item.

4.1F. The **Communities of Practice tab** provides the workforce with a way to monitor the most recent contributions in the communities and special interest areas found in the Acquisition Community Connection (ACC). The front page of this tab includes featured Community News articles, highlights from the ACC, a listing of Hot Topic Forums, a link to the ACC monthly newsletter, cloud tags for ACC content, and links to all communities and

special interest areas. Within the individual community areas on the DAP, users will find links to the latest knowledge and discussions , links to the community topic areas, related policy and guidance, and more as additional services are integrated into the Community of Practice tab.

4.1G. The **Training and Education tab** has already evolved significantly to provide the very best possible knowledge pertaining to Training, Continuous Learning, DAU Student Information, Applying for Courses, Academic Support and Professional Development. This tab also includes a link to the DAU iCatelog, Certification and Core Plus Development Guides, Certification Facts, Schedules and Pre-Course Information, Student Services Frequently Asked Questions (FAQs), and Resources in Industry.

4.1H. The **Industry tab** is the one-stop source for information and links about industry support for defense acquisition. This area is focused on Defense Contractor content. The front page of this tab provides a rotating Industry News area, Industry Problems and available DAU Training Solutions, Business and General Service Administration Links, Small Business Links, Learning & Collaboration Tools, and a link to the DAU Alumni Association. Sub pages in this tab feature Industry Associations, Industry Websites, Industry Articles Online, and a detailed Small Business section.

4.1I. The **DAU tab** takes users to the DAU Website. DAU has completely revised their Website http://www.dau.mil to make sure that resources are as user friendly as possible. The new homepage uses a combination of tabs across the top of the site, a left hand navigation, and a series of 5 web parts on the front page to place information critical to students, publications, and campus information right at the user's fingertips. This site can be accessed directly from the above Uniform Resource Locator or as a tab off of the Defense Acquisition Portal.

4.1J. Perhaps the most important feature on the DAP is the Submit **Feedback Button** located near the top right of the portal, the Defense Acquisition Portal is a tool for the Acquisition Workforce and the team supporting this resource is continuously looking for ideas from the site's users. The DAP was built with a lot of input from the workforce and there are many additional innovations planned for the next two years. Feedback from the workforce is essential to make sure this portal is as good as it can possibly be and to help identify the most critical priorities for development efforts. The feedback button is intentionally large on the site and has already provided many key adjustments in just the first month of operation. All are encouraged to let the Acquisition Knowledge Management System leadership know what additional content would help the Acquisition Worker.

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 (TDP), is never used for formal program initiation. Milestone B authorizes entry into Engineering and Manufacturing Development Phase (EMD), 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 5000.02 of 8 December 2008
CJCSI 3170.01H of 10 January 2012 Manual for the Operation of the Joint Capabilities Integration and Development System (JCIDS) of 19 January 2012 SECNAVINST 5000.2E of 1 September 2011
DTM 10-017, September 13, 2010, with change 3, 16 Jan 13
CJCSI 6212.01F of 21 March 2012

5.3 Materiel Development Decision. The Materiel Development Decision (MDD) is the formal entry point to the acquisition system. It authorizes the Analysis of Alternatives (AoA) and prepares the user for the next milestone. Decisions must be based on effective development planning and a strong technical foundation. The DoD Components shall provide evidence at the MDD Review that:

- The candidate materiel solution approaches have the potential to effectively address the capability gap(s), desired operational attributes, and associated dependencies.
- There exists a range of technically feasible solutions generated from across the entire solution space, as demonstrated through early prototypes, models, or data.
- Consideration has been given to near-term opportunities to provide a more rapid interim response to the capability need.
- The plan to staff and fund analytical, engineering, and programmatic activities supports the proposed milestone entry requirements as identified in DoD Instruction 5000.02

5.4. Materiel Solution Analysis. Materiel Solution Analysis is the first phase in the acquisition life-cycle and assesses potential materiel solutions and satisfies phase-specific entrance criteria for the next program milestone designated by the MDA. The Materiel Solution Analysis should be initiated by an MDD, 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 Materiel Solution Analysis does not mean that a new acquisition program has been initiated. Entrance into this phase requires:

5.4.A. An approved Initial Capabilities Document (ICD) resulting from the analysis of potential analysis of current mission performance and an 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 3170.01H of 10 January 2012, and its accompanying manual, CJCSM.

5.4.B. An approved plan for conducting an Analysis of Alternatives (AoA) for the selected concept documented in the approved ICD. The AoA shall focus on identification and analysis of alternatives, measures of effectiveness, cost, schedule, concepts of operations, and overall risk. The AoA shall assess the critical technology elements (CTEs) associated with each proposed materiel solution, including technology maturity, integration risk, manufacturing feasibility, and, where 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 Acquisition Category (ACAT) I and IA programs, the results of the AoA shall provide the basis for the Technology Development Strategy (TDS) (see DoDI 5000.02, sections 5 for further details on the TDS).

5.5. Technology Development. The Technology Development Phase is entered at Milestone A. The purpose of this phase is to reduce technology risk determine and mature the appropriate set of technologies to be integrated into a full system, and to demonstrate CTEs on prototypes. 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.

5.5.A. The ICD and 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.

5.5.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.

5.5.C. The potential program exits the TDP when an affordable program or increment of militarily-useful capability has been identified, the technology and manufacturing processes for that program or increment has been assessed and demonstrated in relevant environment; manufacturing risks have been identified, competitive prototyping has occurred 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 or evolutionary increment, 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 complete design of the proposed system. Detailed guidance on CDDs can be found in the CJCSI 3170.01H and CJCSM.

5.5D. A Pre-EMD / Milestone B decision review is conducted during the Technology Development phase when a final Request for Proposal (RFP) will be released prior to milestone B, so that the EMD contract can be awarded immediately after milestone B is approved.

5.6. Milestone B. A Milestone B decision follows completion of the TDP and is used to start the EMD 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 ACAT designation is assigned.

5.6A. Entrance into EMD depends on technology maturity (including software), approved requirements, and full funding. Prior to beginning EMD, 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 EMD, 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. A program is certified and should be fully funded at Milestone B. Further details on the EMD Phase and Milestone B can be found in DoDI 5000.02, section 6.

5.7. 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 SECNAVINST 5000.2E, Chapter 2, (see pages 2-5 thru 2-15) and the Defense Acquisition Portal on the Defense Acquisition University (DAU) website at https://dap.dau.mil/aphome/das/pages/mdid.aspx. These charts depict the ACAT level applicability for each information/document requirement and who has preparation and approval responsibility.

5.8. Lesson Learned. The program initiation process described above is extracted from DoDI 5000.02, 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 Materiel Solution Analysis and TDP may not be necessary if the required technology already exists. In addition, lower ACAT programs are able to tailor required documentation. 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.

5.9. Information Support Plan (ISP) Requirements Certifications. The PM is responsible for developing the ISP for IT, including National Security Systems (NSSs), programs based upon documented requirements. (SECNAVINST 5000.2E) Programs that have ISP requirements must obtain certain certifications as part of the staffing process for ICDs, CDDs, and Capability Production Documents (CPDs). ISP requirements derive from the acquisition and employment of NSSs, which include "equipment that is an integral part of a weapon or weapons systems" (CJCSI 6212.01F of 21 March 2012). Two primary certifications at Program Initiation are the: 1) IT and NSS Interoperability and Supportability Requirements Certification and the; 2) Intelligence Certification.

5.10. 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, encl D). The sponsor submits all Naval CDD/CPD documents involving development, acquisition, or modification of ISP systems to J-6 via the Defense Information Systems Agency-managed Knowledge Management/Decision Support (KM/DS) 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.

5.11. Intelligence Certification. The Joint Staff J-2 will provide intelligence certification as part of the JCIDS staffing of Joint Capabilities Documents (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, encl D). For further details, refer to Chapter VIII, Part C of this Guide.

5.12. 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 2014**:

Calendar Year	Identification
08	First identified in FYDP (fifth year of POM-10), (POM-10 submitted in 5/08)
10	Third year of POM-12, (POM-12 submitted in 5/10)
12	First year of POM-14, (POM-14 submitted in 7/12)
13	FY 14 budget sent to Congress (2/13)
13	Current year - first year of availability (beginning 10/1/13)
14	Second year of availability (beginning 10/1/14)
15	Third year of availability (beginning 10/1/15). Expires for new obligations on 9/30/16
21	Appropriation canceled (9/30/21)

6.1.B. Purpose. The Planning, Programming, and Budgeting System (PPBS) process has served as DoD's central strategic planning, program development, and resource determination process since the 1960s. In 1986 Congress authorized biennial budgeting (submitting 2-year budgets). In 2003, Management Initiative Decision (MID) 913, Implementation of a 2-Year Planning, Programming, Budgeting and Execution (PPBE) Process established budgeted execution as a formal process phase, and established concurrent program and budget reviews. In 2010, beginning with the FY 2012 budget, DoD eliminated the biennial budgets, returning to single-year budgets and the budget/program review will focus on a 5-year period each cycle.

The principal purpose of PPBE is to integrate the information necessary to craft effective plans and programs that address existing and emerging needs into a disciplined review and approval process. It is the primary means for the Secretary of Defense (SECDEF) to control allocation of resources, and aims to achieve the best mix of forces, manpower, material, equipment, and support. **Planning** establishes the strategic priorities and capabilities required to achieve the strategy; **programming** applies resources to programs that provide the capabilities required to achieve the strategic priorities; **budgeting** properly prices the programs, develops justification and an execution plan; and **execution** performs the approved plan. Constrained resources drive the process.

6.1.C. Source Documentation:

- DoDINST 7045.7, The Planning, Programming, Budgeting and Execution Process (dated 25 Jan 2013)
- DON Budget Guidance Manual, Part I, Chapters 1 and 2 (April 2012) (http://www.finance.hq.navy.mil/fmb/guidance/bgm/bgm.htm)
- MID 913, Implementation of a 2-Year Planning, Programming, Budgeting, and Execution Process (dated 22 May 2003)
- PPBE Training (https://fmbweb1.nmci.navy.mil/fmb32training/modules/PPBE)

6.2. Planning Phase

6.2.A. Purpose. The purpose of the planning phase is to determine strategic objectives and priorities to support national security and U.S. foreign policy; identify Navy and Joint capabilities required to accomplish the strategy, and use capabilities to frame the allocation of resources and programs in the programming phase. The Various strategic planning documents are reviewed and revised during the Planning Phase. The major DoD output of the planning phase is the Defense Planning Guidance (DPG), issued by SECDEF. In addition to the DPG, a Quadriennial Defense Review (QDR) is conducted at the beginning of each 4-year administration to review the overall Defense assumptions and strategy, as well as to establish overarching Defense initiatives and goals.

6.2.B. 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.
- OSD and the JCS conduct a combined examination of the major issues and performance metrics.
- OSD issues the DPG document.

6.2.C. Principle DoD Planning Documents:

- National Security Strategy (NSS) – reflects the Administrations national interests, goals and priorities of the U.S.
- Quadriennial Defense Review (QDR) – foundation document for defense strategy and policy, reviews all elements of defense policy and strategy to support NSS
- National Defense Strategy (NDS) – reflects DoD's strategic context and objectives for military force structure, force modernization, supporting infrastructure, and required funding and manpower resources
- DPG – provides guidance to the Secretaries of the Military Departments to submit their Program Objectives Memoranda (POMs) within resource constraints

6.2D. Principle Navy Planning Documents:

- Sea Power 21 – provides Navy vision setting the general future end state
- Maritime Strategy – determines the specific objectives set in the general vision, describes how Seapower will be applied around the world
- Naval Operations Concept – comprises the commanders' guidance for using current forces to operationally carry out the strategy guidance
- Navy Strategic Plan – frames capabilities-based strategy, aligns resource decisions with strategic objectives, provides a prioritized list of warfighting capabilities for further assessment
- Chief of Naval Operations (CNO) Guidance – identifies CNO intentions and priorities for coming fiscal year

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

6.3. Programming Phase

Flow Process: Dates are general for POM-14

POM-14 SECNAV Guidance:	November 2011
POM-14 Sponsor Program Proposal (SPP) Build	Feb-Mar 2012
POM-14 SPPs to N80	Feb 2012
POM-14 POM submission to OSD	August 2012
POM-14 Resource Management Decisions	December 2012

6.3.A. Purpose. The programming phase prioritizes Planning phase requirements with an eye on fiscal constraints. Programming is the first time in PPBE that resources are allocated. The programming phase assigns assets to meet identified missions according to established priorities; and identifies and analyzes mission shortfalls and duplications, suggesting alternatives for minimizing or eliminating threats. During the programming phase, the Services seek to balance resources between manpower, investments and readiness, 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 Resource Management Decisions (RMDs). The issuance of the RMDs completes the Programming process.

6.3.B. Principle Steps in the Navy Programming Phase. Programming in the Navy begins in September with reviews of intelligence, strategy, warfare areas and support tasks. The reviews define funding needed to accomplish certain program levels or capabilities and make recommendations to the resource sponsors to use in preparing their SPPs. The reviews are summarized in Investment Strategies in the December/January timeframe. From January until February, the resource sponsors develop their SPPs, which constitute the basic building blocks for the POM. These proposals are submitted to N80, then to CNO.

6.3.C. Principle Documents of the Programming Phase:

- POM – contains specific programs to be pursued in support of the planning guidance and within the resource constraints approved by SECDEF in the DPPG
- Issue Books – single page narratives prepared by OSD staff, DoD Components, and Office of Management and Budget (OMB)
- RMD – Documents containing 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 (April 2012) (http://www.finance.hq.navy.mil/fmb/guidance/bgm/bgm.htm)
- DoD Directive 7045.14, The Planning, Programming, Budgeting and Execution Process (dated 25 Jan 2013)
- PPBE Training (https://fmbweb1.nmci.navy.mil/fmb32training/modules/PPBE)

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 2014 Budget

FY 2014 submitted to ASN(FM&C)	Issues/ Issue Papers	FY 2014 submitted to OSD	OSD Review	RMD/ Reclama	FY 2014 submitted to Congress	FY 2013 Execution Review
1 Jun 12	Jun-Jul 12	Aug 12	Sep-Dec 12	Nov-Dec 12	Feb 13	Mar-Apr 13

6.4.B. Purpose. The Budgeting phase (formulation and justification) produces an annual budget request to Congress linking missions to required funding. It 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). 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. 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, Cost Assessment and Program 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.

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).
- 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.
- OSD and OMB issue Resource Management Decisions (RMDs) to modify the BES.
- The BES as modified by the RMDs, 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 –contains recommended budget estimates based on aggregated inputs from operational organizations and field activities
- RMDs – 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 (Aug 2012) (http://www.finance.hq.navy.mil/fmb/guidance/bgm/bgm.htm)
- Assistant Secretary of the Navy (Financial Management and Comptroller) (ASN(FM&C) budget guidance memos (https://fmbweb1.nmci.navy.mil/guidance/bg_memoranda.htm)
- PPBE Training (https://fmbweb1.nmci.navy.mil/fmb32training/modules/PPBE)

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, AIR-10.1.4, and AIR-10.4) 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 RMDs. 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:	Kathy Dagenhart, AIR-10.1, (301) 757-7716
PEO(A)/APN:	Theresa Poston, AIR-10.1.1, (301) 757-7814
PEO(W)/NAVAIR/WPN/OPN/PANMC:	Jennifer Chermansky, AIR-10.1.2, (301) 757-7776
PEO(T)/RDT&E,N:	Mike Barnett, AIR-10.1.4, (301) 757-7796
O&M,N/O&M,NR:	Rodney Gladden, 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.

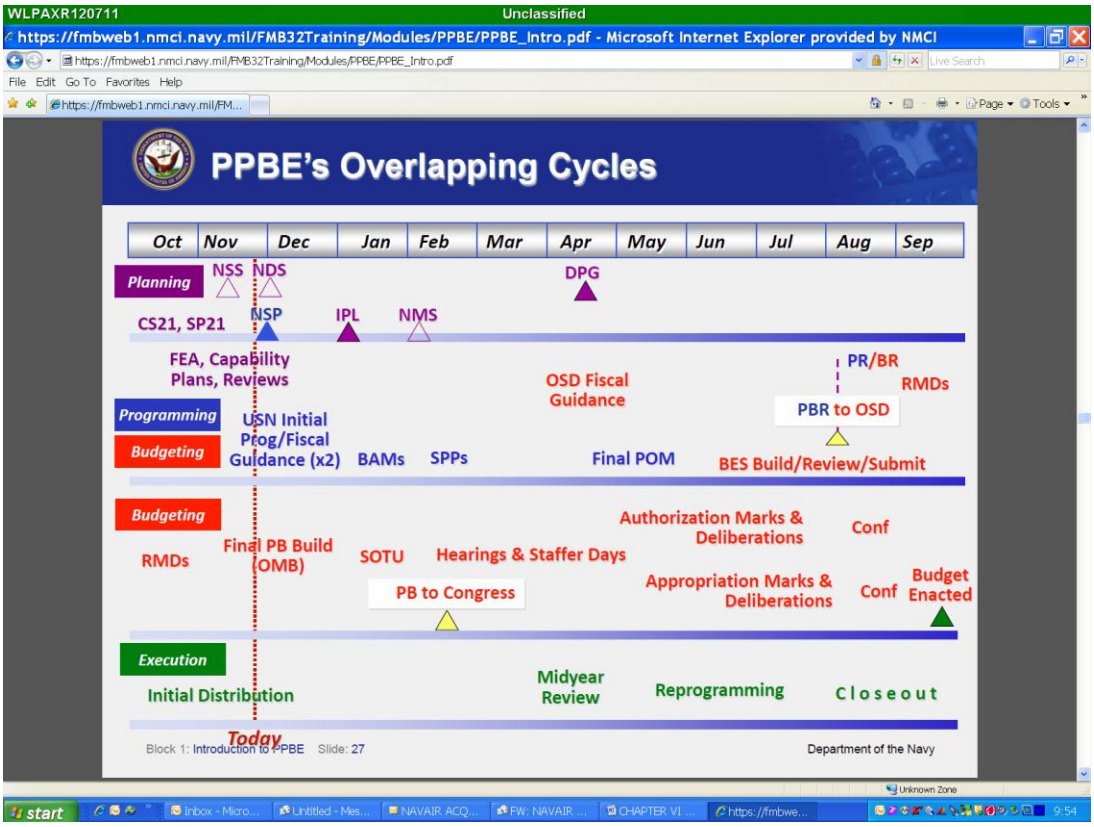
6.5.C. Source Documentation: Allocation documents

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/RFMs 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 Navy ERP. 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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https://fmbweb1.nmci.navy.mil/FMB32Training/Modules/PPBE/PPBE_Intro.pdf - Microsoft Internet Explorer provided by NMCI
PPBE's Overlapping Cycles
Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep
Planning
NSS NDS
DPG
NSP
IPL
NMS
CS21, SP21
FEA, Capability Plans, Reviews
OSD Fiscal Guidance
PR/BR
RMDs
PBR to OSD
Programming
Budgeting
USN Initial Prog/Fiscal Guidance (x2)
BAMs
SPPs
Final POM
BES Build/Review/Submit
Budgeting
Authorization Marks & Deliberations
Conf
RMDs
Final PB Build (OMB)
SOTU
Hearings & Staffer Days
PB to Congress
Appropriation Marks & Deliberations
Conf
Budget Enacted
Execution
Initial Distribution
Midyear Review
Reprogramming
Closeout
Today
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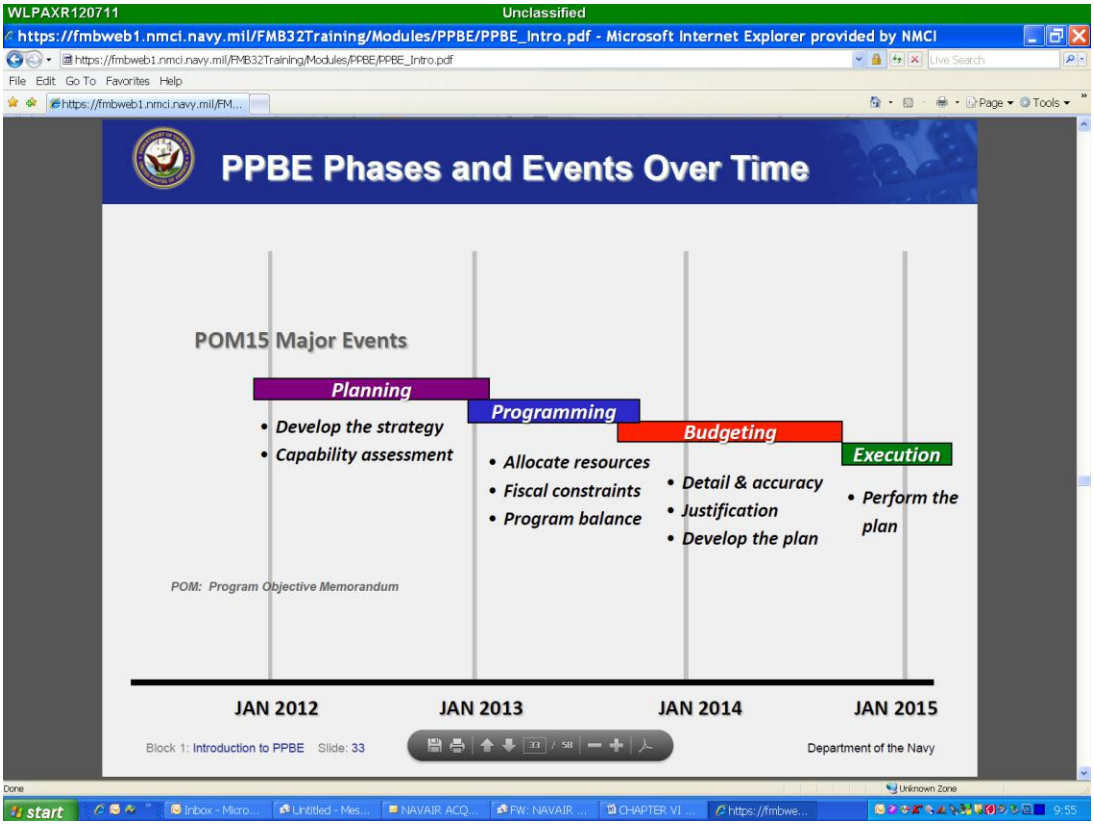
Department of the Navy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Unclassified
https://fmbweb1.nmci.navy.mil/FMB32Training/Modules/PPBE/PPBE_Intro.pdf - Microsoft Internet Explorer provided by NMCI
PPBE Phases and Events Over Time
POM15 Major Events
Planning
Develop the strategy
Capability assessment
Programming
Allocate resources
Fiscal constraints
Program balance
Budgeting
Detail & accuracy
Justification
Develop the plan
Execution
Perform the plan
POM: Program Objective Memorandum
JAN 2012
JAN 2013
JAN 2014
JAN 2015
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Department of the Navy

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 5000.02, encl (3)
SECNAVINST 5000.2E, Chapter 1 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 Part A. 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 5000.2E, Chapter 1, paragraph 1.4.6, 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, PMs should prepare a memorandum to the designating authority using the format found in the DON Acquisition and Capabilities Guidebook, encl (2) Annex 2F. 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:

ACAT Level	**ACAT Designating Authority**
ID	Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD(AT&L))
IC (Component)	SECNAV or if delegated, ASN(RD&A) as the CAE
IAC	SECNAV or if delegated, ASN(RD&A) as the CAE
IAM	USD(AT&L), or designee
II	ASN(RD&A)
III and IVT/IVM	PEOs/Cognizant SYSCOMs/DRPMs

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 USMC; DoD and the Air Force only recognize ACAT I, II, and III designations. The Abbreviated Acquisition Program category is also strictly a Navy concept.

7.7. Urgent Capability Needs and Acquisition Processes. An urgent need is an exceptional request from a Navy or Marine Corps component commander for an additional warfighting capability critically needed by operating forces conducting combat or contingency operations. The two acquisition processes utilized to meet this need include the DON Urgent Needs Process (UNP) and the Rapid Deployment Capability (RDC) Process. UNP encompasses Navy urgent operational need (UON), Marine Corps urgent universal need statement (UUNS) and processes joint urgent operational needs (JUONs) that are assigned to the Department of the Navy. RDC provides the ability to react immediately to a newly discovered enemy threat(s) or potential enemy threat(s) or to respond to significant and urgent safety situations through special, tailored procedures. It is envisioned that most RDC procurement would evolve into a typical ACAT program after the initial urgent requirement is met. Additional information is available in SECNAVINST 5000.2E, Chapter 1, paragraph 1.8.

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

Acquisition Category	Criteria for ACAT or AAP Designation	Decision Authority
ACAT I	• Major Defense Acquisition Programs (MDAPs) (10 U.S.C. §2430) • RDT&E total expenditure > $365 million in Fiscal Year (FY) 2000 constant dollars, or • Procurement total expenditure > $2.190 billion in FY 2000 constant dollars, or • MDA designation as special interest	ACAT ID: USD(AT&L) ACAT IC: SECNAV, or if delegated, ASN(RD&A) as the CAE (not further delegable)
ACAT IA 1/	• Major Automated Information Systems (MAISs) • Program costs/year (all appropriations) > $32 million in FY 2000 constant dollars, or • Total program costs > $126 million in FY 2000 constant dollars, or • Total life-cycle costs > $378 million in FY 2000 constant dollars • MDA designation as special interest	ACAT IAM: USD(AT&L), or designee ACAT IAC: SECNAV, or if delegated, ASN(RD&A), as the CAE (not further delegable)
ACAT II	• Does not meet the criteria for ACAT I • Major Systems (10 U.S.C. §2302(5)) • RDT&E total expenditure > $140 million in FY 2000 constant dollars, or • Procurement total expenditure > $660 million in FY 2000 constant dollars, or • ASN(RD&A) designation as special interest • Not applicable to IT system programs	ASN(RD&A), or the individual designated by ASN(RD&A)
ACAT III	• Does not meet the criteria for ACAT II or above • Weapon system programs: • RDT&E total expenditure ≤ $140 million in FY 2000 constant dollars, or • Procurement total expenditure ≤ $660 million in FY 2000 constant dollars, and • Affects mission characteristics of ships or aircraft or combat capability • IT system programs: • Program costs/year ≥ $15 million ≤ $32 million in FY 2000 constant dollars, or • Total program costs ≥ $30 million ≤ $126 million in FY 2000 constant dollars, or • Total life-cycle costs ≤ $378 million in FY 2000 constant dollars	Cognizant PEO, SYSCOM commander, DRPM, or designated flag officer or SES official. ASN(RD&A), or designee, for programs not assigned to a PEO, SYSCOM, or DRPM.
ACAT IVT	• Does not meet the criteria for ACAT III or above • Requires operational test and evaluation • Weapon system programs: • RDT&E total expenditure ≤ $140 million in FY 2000 constant dollars, or • Procurement total expenditure ≤ $660 million in FY 2000 constant dollars • IT system programs: • Program costs/year < $15 million, or • Total program costs < $30 million, or • Total life-cycle costs ≤ $378 million in FY 2000 constant dollars	Cognizant PEO, SYSCOM commander, DRPM, or designated flag officer, SES official, or PM. ASN(RD&A), or designee, for programs not assigned to a PEO, SYSCOM, or DRPM.
ACAT IVM	• Does not meet the criteria for ACAT III or above • Does not require operational test and evaluation as concurred with by OTA • Weapon system programs: • RDT&E total expenditure ≥ $10 million ≤ $140 million in FY 2000 constant dollars, or • Procurement expenditure ≥ $25 million/year, ≥ $50 million total ≤ $660 million total in FY 2000 constant dollars • Not applicable to IT system programs	Cognizant PEO, SYSCOM commander, DRPM, or designated flag officer, SES official, or PM. ASN(RD&A), or designee, for programs not assigned to a PEO, SYSCOM, or DRPM.
Abbreviated Acquisition Program	• Does not meet the criteria for ACAT IV or above • Does not require operational test and evaluation as concurred with in writing by OTA • Weapon system programs: • Development total expenditure < $10 million, and • Production or services expenditure < $25 million/year, < $50 million total • IT system programs: • Program costs/year < $15 million, and • Total program costs < $30 million	Cognizant PEO, SYSCOM commander, DRPM, or designated flag officer, SES official, or PM. ASN(RD&A), or designee, for programs not assigned to a PEO, SYSCOM, or DRPM.

1/ In some cases, an ACAT IA program, as defined above, also meets the dollar threshold definition of an MDAP. Per DoD Instruction 5000.02 of 8 Dec 2008, enclosure 3, table 1, footnote 1, the statutory requirements that apply to MDAPs or MAIS programs shall apply to such programs, as designated by the Secretary of Defense. Public Law 111-84 of 28 Oct 2009, section 817, subsections (a) and (b), (FY 2010 National Defense Authorization Act), amended section 2445d of title 10, U.S.C., whereby the Secretary of Defense may, as a general rule, designate a MAIS program that requires the development of customized hardware to be treated ONLY as an MDAP under chapter 144 title 10, U.S.C., subject to chapter 144 MDAP requirements, and a MAIS program that does not require development of customized hardware to be treated ONLY as a MAIS program under chapter 144A of title 10, U.S.C., subject to chapter 144A MAIS program requirements.

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 5000.02
SECNAVINST 5420.188F
NAVAIRINST 5000.20A
SECNAVINST 5000.2E

7.11. Acquisition Model Comparison: There are three versions of the Acquisition Model. DON new start ACAT programs shall follow the acquisition life-cycle model established by DODI 5000.02. Ongoing ACAT programs will follow the guidance provided in enclosure 2, paragraph 1.b of DODI 5000.02 and paragraph 4.3.1 of DODD 5000.01. The 2011 acquisition model includes a new Pre-EMD decision point in the TD phase. During the EMD phase, the MDA must compose a Post-Preliminary Design Review (PDR) and Post-Critical Design Review (CDR) Assessment. These assessments review the extent to which the system meets requirements and design maturity, respectively. In addition during the EMD phase, an Integrated System Design as well as the System Capability and Manufacturing Process Demonstration are conducted.

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 an EMD 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 Program Decision Meeting (PDM). A formal review at which a milestone decision is not being made will be referred to as a Program Review (PR). The PDM and PR procedures are found in SECNAVINST 5420.188F of 2 November 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 PDMs. 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 a PDM, 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 PDM before proceeding to a Defense Acquisition Board (DAB) review at the USD(AT&L) level). Prior to proceeding to a PDM, 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 5000.20A of 23 August 2010. PMs should consult with their program's PEO/AIR-1.0 acquisition support staff on administrative procedures for scheduling and

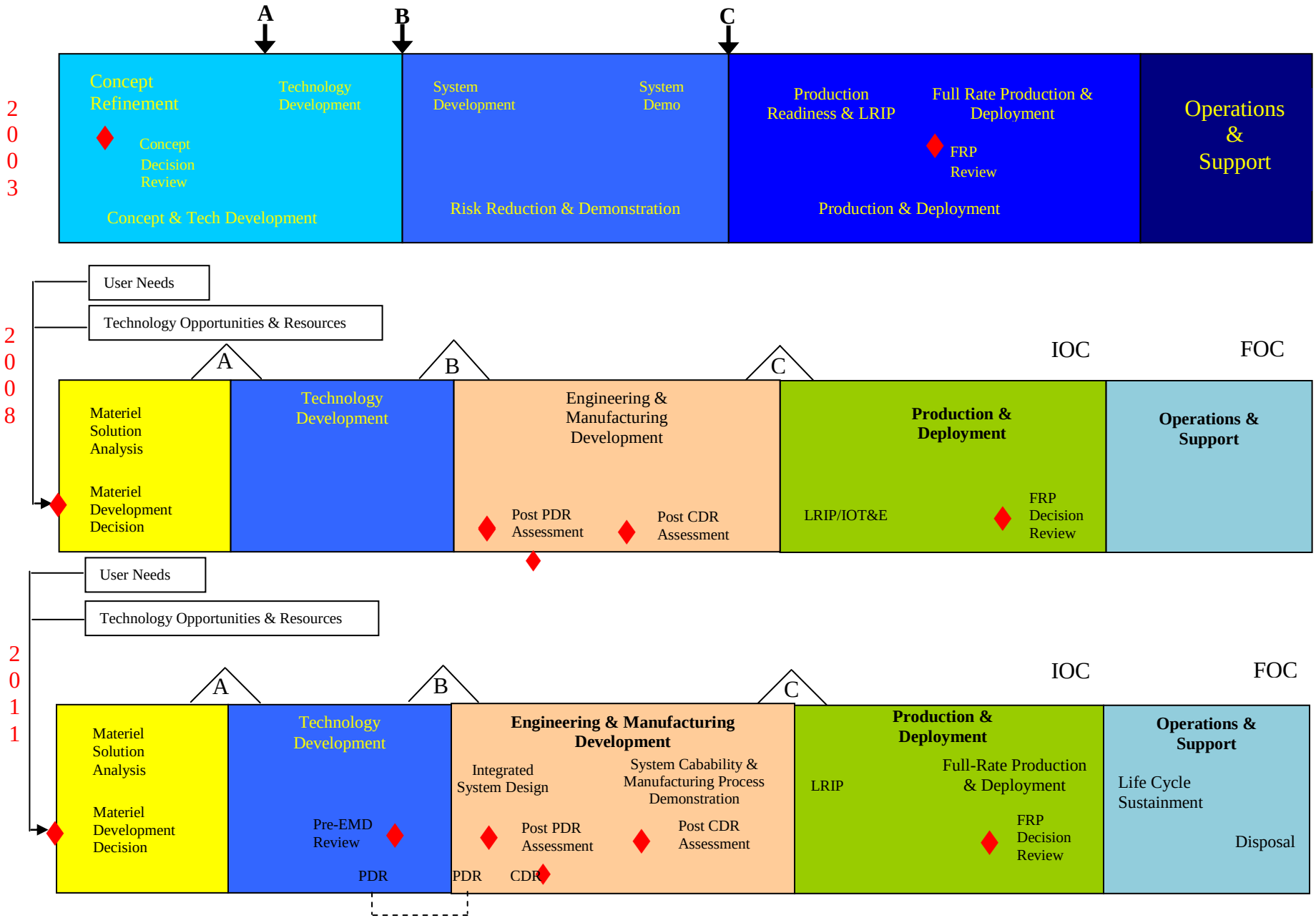
conducting ARBs. An automated NAVAIR/PEO Acquisition Review Board/Program Decision Meeting schedule is contained on the PMC Web Tool and is maintained by Colin Grey, AIR-1.1, colin.grey@navy.mil.

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 5000.20A; 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 PM and is approved 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. Additionally, OSD memo dated 23 Jun 11 Subj: Improving Milestone Process Effectiveness outlines changes to the milestone review process. This memo may be found at: https://mynavair.navair.navy.mil/portal/server.pt/gateway/PTARGS_0_2_10174_1664_69752_43/http;/c27vwottpaxr01.navair.navy.mil/pmcwebtool/index.cfm?method=home.viewPDFDocument&document_id=1935

7.14. POC: 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 two required interoperability-related certifications: (1) Net-Ready Key Performance Parameter (NR KPP) certification (performed by the Joint Staff DDC4/Cyber Directorate (J-6)), and (2) Joint Interoperability Certification (based on Joint Interoperability Test Command (JITC)-certified interoperability testing results). The first is performed prior to both acquisition milestones B and C, while the second occurs concurrent with or subsequent to developmental/operational testing (see "Interoperability Testing" below).

7.15.A. The 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. J-6 reviews, comments on, and certifies NR KPPs using the NR KPP certification process outlined in CJCSI 6212.01F. Further information and guidance on NR KPP development is at https://intellipedia.intelink.gov/wiki/Net_Ready_Key_Performance_Parameter_(NR_KPP)_Manual.

7.15.B. JITC-certified interoperability testing evaluates the operational status of the NR KPP requirements (including interfaces, enterprise-level exchange requirements, and other interoperability requirements). A joint interoperability certification is issued when a system has met all of its interoperability requirements, to verify that the system's interoperability is sufficient to support a fielding decision.

7.16. Interoperability Testing. [The following text is extracted from the DoD memo, *Interim Guidance for Interoperability of IT and NSS*, 27 March 2012.] "Interoperability shall be assessed through formal operational test and evaluation by a DoD Component Operational Test Authority (OTA) or DISA (JITC), joint exercises, or a combination of any of the above. The JITC shall serve as the Joint Interoperability Certification Authority for the DoD, under the oversight and direction of the DoD CIO. As such, DISA (JITC) shall develop procedures to verify, assess, and certify, through testing, IT and NSS (ACAT and non-ACAT) interoperability throughout a system's life." For further details, refer to the JITC Interoperability Process Guide, available at http://jitc.fhu.disa.mil/cgi/isgsite/pubs.aspx.

7.17. ISP Assessment Tool. The GIG Technical Guidance Federation (GTG-F), 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 GTG-F is maintained on NIPRNet at https://gtg.csd.disa.mil/. Per the DASN(RDT&E) memo, *Implementing the DoD Interoperability Guidance*, 26 July 2012, all unclassified ISPs must be submitted via the GTG-F site, and subsequent review comments will be posted therein. The Navy POC for GTG-F entry is DASN(RDT&E) SE&P/SPG, Mr. Ken Ives, (301) 757-3257. Program management offices shall access the GTG-F Program Management Portal (PM-P) directly for submission of ISPs and subsequent monitoring of their review progress. Access is controlled by PKI registration (via Common Access Card (CAC)) and may be requested via a link on the website. Requestors must have a referral from a current GTG-F registered user. As of March 2013, a SIPRNet version of GTG-F is still in development. For classified ISP submissions, contact DASN(RDT&E) SE&P for guidance and assistance.

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—correlated with the CDD—is due prior to Preliminary Design Review (PDR), to provide the basis for the interoperability engineering processes. The ISP is submitted for DON and DoD/Joint assessment via the GTG-F Enhanced ISP (EISP) tool (see above). In accordance with SECNAVINST 5000.2E, ISPs are approved by the applicable PEO/SYSCOM/DRPM, subsequent to completion of the formal review process, adjudication of outstanding comments, and ISP acceptance. For further details on ISP preparation and submission, refer to Chapter VIII, Part C of this Guide.

7.19. POC: Ken Ives, Mission Engineering & Interoperability, AIR-4.1.18, (301) 757-3257

CHAPTER VIII: PROGRAM AUTHORIZATION PROCESS

PART A: ACQUISITION STRATEGY (AS)

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, affordability requirement, and program management including resources and oversight, interoperability, the use of open systems, the support strategy, and the contracting strategy. The Acquisition Strategy shall be developed to meet the specific needs of individual programs. An Acquisition Strategy is also required for acquisitions of services to ensure adequate planning and oversight (see Chapter XV, Part J on the Management and Oversight Process for the Acquisition of Services (MOPAS)). An approved OSD Acquisition Strategy template dated 20 Apr 11, can be found on the PMC Web Tool.

8.2 Source Documents:

The Defense Acquisition Guidebook, Section 2.3
SECNAVINST 5000.2E, Chapter 2, Paragraph 2.4
DON Acquisition and Capabilities Guidebook, encl (3), Section 3.4
NAVAIRINST 4200.36E

8.3. When Required. A program's MDA will approve the program's initial Acquisition Strategy at the pre-EMD review. The AS shall be provided 45 days prior to the pre-EMD review. 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. The above listed source document references provide a detailed description of topics that should be considered for inclusion in the Acquisition Strategy. Specific attention shall be given to overall affordability; the competition strategy and incentive structure; engineering trades and their relationship to program requirements; should cost initiatives, risk management; and the rationale supporting the program schedule. 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. Both the AS Outline and guidance on the automated AP/AS template can be found at https://mynavair.navair.navy.mil/pmcwebtool.

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 desired, at the discretion of the PEO, AIR-1.0, or other AP approval authority, programs may combine the AS (or the TDS) and the AP into a single document. Such a consolidation is more practical in the case of ACAT III and IV programs, where the AP approval level MDA (PEO, AIR-1.0, or other AP approval authority) is the same as the AS approval level MDA. There is an electronic AP/AS tool available to assist with drafting this combined document available on https://mynavair.navair.navy.mil/pmcwebtool. See Part B of this Chapter for more details on APs. See Chapter VIII Part E for more details on Program Tailoring/Streamlining.

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 AP is the principal document for in-depth program planning, review, and oversight. The purpose of this planning is to ensure that the Government meets its needs in the most effective, economical, and timely manner.

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

DFARS's Procedures, Guidance, and Information (PGI) 207.1 (provides AP content guidance) at http://www.acq.osd.mil/dpap/dars/pgi/pgi_htm/PGI207_1.htm
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NAVAIRINST 4200.36E 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 4200.36E can be found at http://mynavair.navair.navy.mil/ and the AIR-1.0 Acquisition Plan Policy Changes memo at https://mynavair.navair.navy.mil/pmcwebtool/.

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 appropriate 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, one-time buy, or life-of-type buys. These buys refer to a single contract that covers all known present and future requirements. This exception does not apply to a multi-year contract or a contract with options or phases.See NAVAIRINST 4200.36E 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.

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-4.1G, 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 4200.36E). However, the DON AP Guide contains a recommended format and the NAVAIR PMC Web Tool contains a standard AP format. 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 . The program manager, the procuring contracting officer, and either the chief of the contracting office for NAWC acquisitions supporting non-NAVAIR/non-PEO programs, the cognizant AIR-2.0 SES department head for all acquisitions supporting AIR-1.0/PEO programs, or other Requiring Activity Level 1,will sign/concur on the AP signature page. PEO or AIR-1.0 Programs with individual contract actions (including options) > $50M or < $100M, shall be signed by the PEO or AIR-1.0. Non-PEO or Non-AIR-1.0. Programs with individual contract actions or Acquisitions (including options) for production or services > $50M or < $100M or for development > $10M or < $100M shall be signed by the Requiring Activity Level 1. Non-PEO or Non-AIR-1.0 Programs or Acquisitions $\leq$ to $50M that contain an individual contract action $\geq$ $25M shall be signed by the Requiring Activity Level 1. APs for programs $\geq$ $100M shall be signed by DASN(AP).

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 10 of NAVAIRINST 4200.36E.

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.

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] (https://acc.dau.mil/dag)
DoDI 5000.2, 12 May 03
SECNAVINST 5000.2E

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 07)
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 5000.2E implements the DoD ISP policy and procedures for the Navy. The DASN(RDT&E) CHSENG is the DON principal point of contact 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, SPAWARSYSCOM, and MARCORSYSCOM 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.

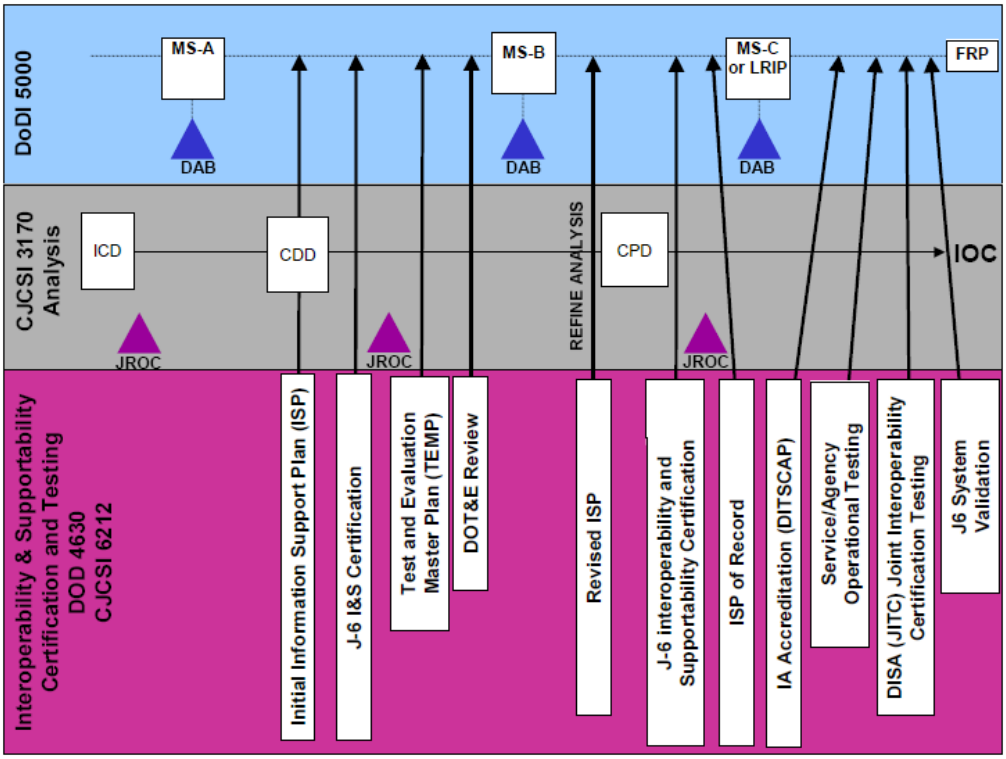


Figure A-1, J-6 Interoperability and Supportability Certification, Testing, and Validation Process for ACAT Programs (from CJCSI 6212.01D).

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-6I 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 https://acc.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. The TEMP may be a stand-alone document, or it may be included as the T&E management section of a Single Acquisition Management Plan (SAMP). TEMPs are required for all Navy ACAT programs at Milestone B. The TEMP is updated at FRP DR, reviewed for currency and updated, if required, at Milestone C. When the program changes significantly, TEMPs may be updated via a formal revision, however minor changes may be accomplished via an N842 published page change. A current approved TEMP is required for milestone decision reviews, for conducting operational testing, and for certification of readiness for operational test phases. The NAVAIR process for TEMP drafting and approval is contained in NAVAIRINST 3960.2D.

8.30. Reference Documents:

DoD Directive 5000.1
DoD Instruction 5000.02
Defense Acquisition Guidebook
SECNAVINST 5000.2E
NAVAIRINST 3960.2

8.31. Process. A completed TEMP is the culmination of a comprehensive coordinated effort between the PMA; the developmental test activities (both contractor and government), live fire test and evaluation, and operational test agencies; N842; the program sponsor; the Deputy Assistant Secretary of Defense for DT&E; and in the case of oversight programs, the Office of the Secretary of Defense (OSD). The TEMP process steps and associated notional timeframe are outlined 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 (May require multiple Test and Evaluation Working Level IPT (T&EWIPT) 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 ACAT II - 4 months ACAT III - 3 months ACAT IVT - 2 months ACAT IVM - 1 month 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, and CPD) is

required before a TEIN is assigned. The Program Office Assistant Progam Manager for Test and Evaluation (APMT&E) requests a TEIN via N88 and N842 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 N842. 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 6 months or longer.**(see above table).

8.34. AIR 5.1.1 ESR. After the TEMP is mature and before it is distributed for 0-6 Review, an ESR shall 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 0-6 level in parallel to all organizations that sign the TEMP. PEO staff review is considered part of the 0-6 review process. 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: J. R. Mathers, AIR-5.1.1.4, (301) 757-9901

CHAPTER VIII: PROGRAM AUTHORIZATION PROCESS

PART E: PROGRAM TAILORING/STREAMLINING

8.39. Source Documents:

DoDD 5000.1
SECNAVINST 5000.2E

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 Engineering and Manufacturing 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 5000.02 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 M 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. 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 Chapter 2, Table E2T1 of SECNAVINST 5000.2E 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 begins 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 4200.37B, dated 27 August 2010, describes the PID process from identification of a requirement by the PM to the point where Contracts releases a new solicitation to industry, or a modification or order is incorporated into an existing contract using the Standard Procurement System (SPS). 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 4200.37B focuses on increased flexibility in PID process procedures to allow for tailoring to meet procurement milestones. It reinforces the leadership role of the PM/IPT Lead/Project Lead and empowers the Integrated Program Team (IPT)/Project members to make decisions for their competency. To facilitate the PID process, the Procurement Management Tool (PMT) will used for planning, execution and management of all procurement actions which use SPS. Goals of the PID process include:

9.1.A. Ensuring up-front planning and requirements definition to include achieving consensus on the supply/material or services to be procured is defined within the Procurement Planning Conference (PPC)/Procurement Planning Agreement (PPA) process and recorded in the PMT. In addition, this up-front planning should include establishing the contract line item structure **before** the IPT drafts a PID. Specifically for supply/material lines, a "one-to-one" line item match between the Section B of the PID, the Navy ERP ZSPS Purchase Requisition, the SPS Contract and the resulting Navy ERP Purchase Order is required for all different items that will be priced, accepted (DD-250'd, etc.), invoiced and/or inventoried (each inventory location gets its own unique CLIN) by material number (i.e. NIIN, NICN or Navy LICN). In addition, for each supply/material line a decision must be made whether upon receipt the item will be: (1) put into inventory (i.e., plant stock or project stock); (2) counted as an asset; or (3) used/consumed immediately (i.e., expensed upon receipt).

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.

9.1.C. Embracing the use of the Procurement Management Tool (PMT) to assist with procurement planning, execution, and management.

9.1.D. Embracing the use of the Navy ERP to assist with project planning, procurement execution and asset tracking.

9.2. What to Concentrate On

9.2.A. Planning

9.2.A.i. A PMT record will be created as soon as the PM or IPT/Project lead has identified a requirement. In support of this the PM or IPT/Project Lead informs members of the IPT/Project of the basic (draft) program procurement requirements via e-mail, requirements letter, or other methods and schedules a PPC for more in-depth discussion. Since the purpose of the PPC is to have well prepared IPT members discuss and reach program requirement and schedule decisions, pre-PPC meetings should be considered to clarify issues and concerns to help with this preparation. Decisions reached at the PPC (see para 9.2.B) are to be recorded in the PMT and will be part of the formal PPA. 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 2 years in advance for an APN-5 OSIP (Operational Safety Improvement Program) program?" You do not 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 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 PPC.

9.2.A.iii. For production aircraft programs creation 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 prime contractors), establishment of the contract line item structure to include the appropriate level for supply/material lines, and development of an appropriate acquisition strategy are important steps. For Research and Development (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 the requirements the budget input is based on and also creating a PMT PID record. In addition, ensure the entire IPT via the PPC process 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.). To facilitate the PPC, the PPC Checklist within the PMT will be used. Recording the results of the PPC within PMT PID record allows for the documentation of the requirement, the generation of the PPA, and proper procurement planning, execution, and management (to include changes) of the requirement. Management of the procurement to the PPA using the PMT Tool will ensure, all IPT/Project Team members are aware of the key procurement milestones/tasks to be addressed and who is the lead for those tasks and the due dates. In addition, there will also be an audit trail within the PMT of requirement changes, budget process changes, IPT member changes and documentation changes.

9.2.C. Scheduling. Set dates for completion of tasks and continuous monitoring of the achievement of those tasks using the PMT. 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 PMs and IPT/Project Leads 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/AS, Spec, etc.). Some PM and IPT/Project Leads may assume it is the role of Contracts to prepare the PID since Contracts issues the solicitation. This is not true; the PMs and IPT/Project Leads are responsible to define the requirement and generate all requirements documentation even if the various tasks have been delegated to IPT/Project Team Members. Contracts personnel, as agreed upon at the PPC, can assist with document preparation (i.e. Section B, etc.), as required, to facilitate timely and accurate document preparation.

9.3.B. Designate one person within the PM and IPT/Project Lead community to coordinate, control and monitor the PID.

9.3.C. Include Foreign Military Sales (FMS) personnel when holding PPCs via the PMT 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 & J to provide preparation assistance, briefly describes the DoD acquisition process, and how the procurement process is integrated with the acquisition milestones. In addition, it 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 both the:

(1) the Acquisition Timeline (web repository) at (https://mynavair.navair.navy.mil/portal/server.pt/community/acquisition_timeline/1496) in which the Procurement Package Development tab should be selected, then PID and then Supporting Documentation, or

(2) the Program Management Community (PMC) Webtool at https://mynavair.navair.navy.mil/pmcwebtool/index.cfm?method=home.main&page_id=733 in which the PID Process Tab should be selected.

9.4.B. NAVAIRINST 4200.37B, subj: The Procurement Initiation Document Process, dated 27 August 2010, 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 both the Acquisition Timeline (web repository) Library and the Program Management Community (PMC) Webtool web links listed in Para 9.4.A

9.5. POC: Steve Smith, Acquisition Policy & Processes, AIR-1.1, (301) 757-8731 and Stephen J. Weber, Acquisition Tools, AIR-1.7, (301) 342-7915

9.6 TYPES OF PROCUREMENT INITIATION DOCUMENTS

Document	Purpose
Procurement Initiation Document (PID)	Provides Contracts information necessary for appropriate procurement actions. NAVAIRINST 4200.37B 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 Contract Management Agency (DCMA).
Interdepartmental Purchase Request (IPR)	Used to procure services, supplies, etc., from activities outside DoD. Requires approval from the Office of Counsel (AIR-11.0) and Contracts (AIR-2.0).
Military Standard Requisitioning and Issue Procedure (MILSTRIP)	Used to requisition supplies or repair parts - from DLA and Services' stock.
THE FOLLOWING ARE NOT CONSIDERED PIDS	
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 . **PPC ANNOUNCEMENT**

9.7.A. Procurement Planning Conferences (PPCs) are used to conduct advanced planning for procurements of all types such as supply/material (hardware), services, Modification Kits, and Engineering Change Proposal (ECPs), etc.

9.7.B. Program Managers Planning Agreement, using the PMT, can now generate a PPA as soon as the PPC is completed.

9.7C. Processing time for the completion of PPC events will vary, depending upon the nature/complexity of the required procurement.

9.7.D. A PPC, recorded in PMT, is required for all procurement actions that require a SPS action. A major effort might require participation from numerous competency representatives. In other cases, such as a simple modification to an existing contract, the PPC can be a phone call or e-mail exchange between the IPT/Project Lead and the PCO/Negotiator.

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 PPC process and recorded in the PMT. 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. To facilitate the PPC, the PPC checklist contained within the PMT will be used. The results of the PPC are recorded in the PMT and documented in the form of a 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. Note: Since IPT members at the PPC should be prepared to discuss and reach program requirement and schedule decisions, pre-PPC meetings should be considered to clarify issues and concerns to help with this preparation.

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

Critical Prior Events. In support of the PPC process, a PMT record will be created as soon as the PM or IPT/Project lead has identified the requirement and informed IPT/Project members. Prior to the actual PPC, the PM or IPT/Project Lead, as required, must also initiate or update the Acquisition Plan (AP)/Acquisition Strategy (AS) and initiate Clinger-Cohen compliance activity. These efforts should be completed prior to PID initiation. In addition, 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, as recorded in the PMT, 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 Procuring Contracting Officer (PCO), 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 Office of Small Business Programs, 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. Likewise a simple modification to an existing contract, the formal PPC "meeting" may be a simple phone call or e-mail exchange between the IPT/Project Lead and the PCO/Negotiator. The date of the "large" PPC or the "phone call" PPC will be recorded in the PMT.

9.12. The Procurement Planning Agreement (PPA). The results of a PPC are recorded in the PMT and result in a PPA document. 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 via the PMT, distributing copies (or making it available within the PMT) 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, the 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. Both the PMT with the PPC checklist and NAVAIRINST 4200.37B which has a recommended listing of PPC discussion topics provide the IPT/Project Lead guidance on various 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: Steve Smith, Acquisition Policy & Processes, AIR-1.1, (301) 757-8731 and Stephen J. Weber, Acquisition Tools, AIR-1.7, (301) 342-7915

9.16 PROCUREMENT CATEGORY CODING DETAIL

CATEGORY "P1" - N00019-XX-P1-XXXXX (MAJOR)

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

CATEGORY "P2" - N00019-XX-P2-XXXXX (BASIC ORDERING AGREEMENT (BOA))

- PIDs to establish BOA
- 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 BOA
- PPC required for BOAs and BOA orders

CATEGORY "P3" - N00019-XX-P3-XXXXX (OPTIONS)

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

CATEGORY "P4" - N00019-XX-P4-XXXXX (PROVISIONED/MISCELLANEOUS/MINOR)

- General one-time/miscellaneous/provisioned/line item type requirements
  - One-time microcircuit obsolescence buy
  - Production program spin-off or stand-alone Research and Development (R&D) contracts (engineering studies/ investigations, non-recurring engineering, etc.)
  - Production line support (e.g., test equipment/bailment/lay-way)
  - Spares procurement (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 (CS))

- PIDs to establish basic CS type contract
- PIDs* to place orders against CS contracts
- PPC required for new contracts. PPC not required for individual orders.

CATEGORY "P6" - N00019-XX-P6-XXXXX (SBIR)

- Small Business Innovation Research (SBIR) Program – Phase I
- SBIR – 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 requirement
  - Incremental funding/late funds/line of 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 Proposals (ECPs) (Change Control Board (CCB))
  - Spec/SOW changes
  - Adding new line items other than provisioned line items or spares
  - Revised DD Form 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, procedures and tools for the identification and control of data requirements, for assuring the adequacy of data and for facilitating the timely, economical acquisition and availability of data including digital delivery or access. To ensure only minimum essential data is acquired, the data requirements shall be clear, concise, justified, and in accordance with the Statement of Work (SOW). Planning for the acquisition of data is required by the FAR and the Defense Federal Acquisition Regulation Supplement (DFARS) in order for the DoD to carry out missions and programs. Data is required by the Program Manager (PM) and the acquisition team to assure competition among contractor sources; fulfill certain responsibilities for disseminating and publishing the results of acquisition activities; ensure appropriate utilization of the results of research, development, and demonstration activities including the dissemination of technical information to foster subsequent technological development; and meet other programmatic and statutory requirements.

9.18. Source Documentation:

DFARS
Department of Defense Instruction (DoDI) 5000.02, 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 5000.2E, 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)
NAVSEA Data Management Program Operations and Procedures Manual (Rev2) 1 June 2009
NAVAIR Program Management Community (PMC) Web Tool: https://mynavair.navair.navy.mil/pmcwebtool/

9.19. Responsibilities

9.19.A. PMs are responsible for ensuring their data requirements comply with the policy and procedures set forth in DFARS, DoDI 5000.02, DoD 5010.12-M, and NAVAIRINST 4200.21D.

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 PM, 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 (CDD). 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 (PID) can be reduced.

9.21 For additional information on Data Management and One-Time DIDs approval process, please visit the PMC WebTool at https://mynavair.navair.navy.mil/pmcwebtool.

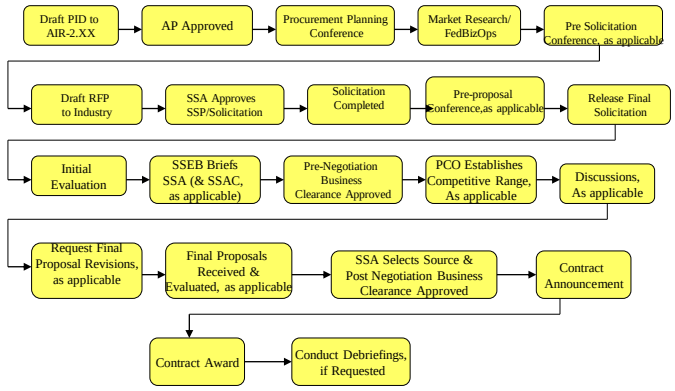
9.22. POC: Chirleen Eaton, AD-1.1.3, (301) 757-6677

CHAPTER IX: PROCUREMENT PROCESS

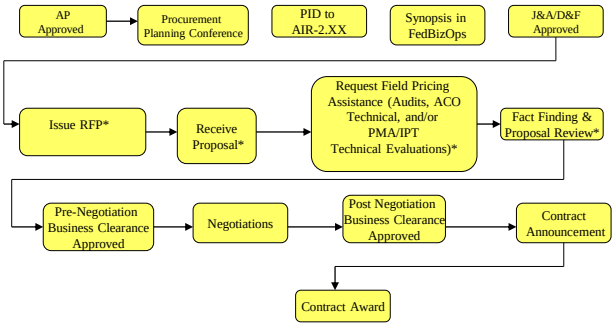
PART D: PROCURING ACTIVITY TO CONTRACT AWARD

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

9.22.A. COMPETITIVE PROCUREMENTS, Typical Events



9.22.B. NON-COMPETITIVE PROCUREMENTS: Typical Events



* Refer to Chapter XV, Part A, of this guide for information regarding the use of teaming for proposal review/analysis.

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 National Defense Authorization Act (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), with the advice of the contracting officer, at the time of Milestone B approval. The basis for the contract type selection shall be documented in the acquisition strategy. In accordance with DoD Class Deviation 2013-O0009, contracting officers shall not use cost-type contracts for the acquisition of major defense acquisition programs, unless the following is submitted to the congressional defense committees: 1) a written certification that the particular cost-type contract is needed to provide a required capability in a timely and cost-effective manner; and 2) an explanation of the steps taken to ensure the use of cost-type pricing is limited to only those line items or portions of the contract where such pricing is needed to achieve the purposes of the exception.

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-6.0 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 NAVAIR 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. Note that authorization or notification to Congress is required for use of multiyear contracts. Refer to DFARS 217.1, Multiyear Contracting, for specific requirements.

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 of teaming.

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 5000.2E, Chapter 1, Paragraph 1.5.5 and Table E1T2

10.2. Discussion

10.2.A The chart on the next page, extracted from SECNAVINST 5000.2E, 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

Table E1T2 Modification Initiation Process Conditions

(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)

Pgm being modified is an active ACAT?	Mod breaches APB threshold?	Mod requires additional funding?[7/]	Mod cost exceeds "Abbreviated Acqn Program" $criteria[4,5/]	PM action	CNO/CMC action[6/]	Program Decision Authority or MDA action
YES	NO	NO	YES [5/] or NO	Execute mod	Approve/validate CDD/CPD [2,5/]	None
YES	NO	YES	YES [5/] or NO	Prepare funding request Execute mod	Approve/validate CDD/CPD [2,5/] or requirement Provide funding	None
YES	YES	NO	YES [5/] or NO	Revise APB [1/] Revise Test and Evaluation Master Plan [2/] Execute mod	Approve/validate CDD/CPD [2,5/] or requirement Endorse APB [1/] Endorse TEMP [2/]	Approve APB [1/] Approve TEMP [2/]
YES	YES	YES	YES [5/] or NO	Prepare funding request Revise APB [1/] Revise TEMP [2/] Execute mod	Approve/validate CDD/CPD [2,5/] or requirement Provide funding Endorse APB [1/] Endorse TEMP [2/]	Approve APB [1/] Approve TEMP [2/]
NO	N/A	NO	NO	Prepare/submit AAP designation request to approval authority Execute mod	Approve requirement	Approve AAP designation request
NO	N/A	YES	NO	Prepare/submit AAP designation request to approval authority Prepare funding request Execute mod	Approve requirement Provide funding	Approve AAP designation request
NO	N/A	YES	YES	Prepare funding request Prepare APB [1/] Prepare TEMP [2/] Prepare ACAT [3/] desig request Execute mod	Approve/validate CDD/CPD [2/] Provide funding Endorse APB [1/] Endorse TEMP [2/]	Approve APB [1/] Approve TEMP [2/] Approve ACAT [3/] designation 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 Defense Acquisition Management Information Retrieval (DAMIR) 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 reference (c) and 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 SECNAV M-5000.2 DON Acquisition and Capabilities Guidebook.

4/ $ criteria for "Abbreviated Acquisition Programs" is less than: for weapon system programs, $10M total development expenditure, $25M production or services expenditure in any fiscal year, and $50M total production or services expenditure for all fiscal years; for IT programs, $15M program costs in any single year and $30M total program costs.

5/ If answer to column 4 is YES, an approved CDD/CPD or CDD/CPD revision is required.
6/ For IT programs, endorsement is provided by the IT functional area manager, approval is provided by the resource sponsor.

7/ For modifications that require additional funding, see ASN(RD&A) memorandum, Acquisition Program Cost Growth; Management of Engineering Change Proposals, of 21 May 2010.

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 Audits**; 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 5000.02, 8 Dec 08
ANSI/EIA-649B, "Configuration Management Standard," Apr 2011
MIL-HDBK-61A, "Configuration Management Guidance," 7 Feb 01
ANSI/EIA-836 "Configuration Management Data Exchange and Interoperability," Jun 02
NAVAIRINST 4130.1D, "NAVAIR Configuration Management Manual," 19 Dec 06

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 Program Management Configuration/Data Management Policy & Processes Division (1.1.3), 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 (1) the systematic process of selecting the product attributes, organizing associated information about the attributes, and stating the attributes. (2) unique identifiers for a product and its configuration documents. (3) configuration management activity that encompasses selecting configuration documents; assigning and applying unique identifiers to a product, its components, and associated documents; and maintaining document revision relationships to product configurations. **Configuration Change Management** is used to (1) ensure that changes to released configuration documentation are properly identified, documented, evaluated for impact, approved by an appropriate level of authority, incorporated, and verified. (2) configuration management activity concerning: the systematic proposal, justification, evaluation, coordination, and disposition of proposed changes; and the implementation of all approved and released changes into (a) the applicable configurations of a product, (b) associated product information, and (c) supporting and interfacing products and their associated product information Configuration control is accomplished primarily through the use of ECP approved by a CCB. **Configuration Audits** are used to verify that the product has achieved its required attributes (performance requirements and functional constraints) and the product's design is accurately documented and will satisfy life cycle requirements. Product configuration verification accomplished by inspecting documents, products and records; and reviewing procedures, processes, and systems of operation to verify that the product has achieved its required attributes (performance requirements and functional constraints) and the product's design is accurately documented. Sometimes divided into separate functional and physical configuration audits. **Configuration Status Accounting (CSA)** is the configuration management activity concerning capture and storage of, and access to, configuration information needed to manage products and product information effectively and is used to record the implementation of approved configuration changes to a material item and its approved documentation. All five 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 ANSI/EIA-649B and MIL-HDBK-61A).

11.6. Responsibilities. AIR-1.1.3 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-1.1.3 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 7 May 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 30 July 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-1.1.3. 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 (NAMP)", resides with the NAVAIRSYCOM Configuration Control Board (CCB) managed by AIR-1.1.3. 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 (N88).

11.9. POC: Daniel K. Christensen, Division Head, Program Management, Configuration/Data Management Policy and Process Division, AIR-1.1.3, (301) 757-8065

CHAPTER XI: CONFIGURATION MANAGEMENT

PART B: ENGINEERING CHANGE PROPOSAL PROCESS

11.10. Purpose. Engineering Change Proposals (ECPs) are any alteration to a product or its released configuration documentation. Effecting an engineering change may involve modification of the product, product information and associated interfacing products and 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.

11.11. Source Documentation/Guidance:

MIL-STD-973, "Configuration Management", 13 Jan 95 (cancelled Sep 00, replaced by ANSI/EIA-649)
ANSI/EIA-836, "Configuration Management Data Exchange and Interoperability," Jun 02
NAVAIRINST 4130.1D, "NAVAIR Configuration Management Policy," 19 Dec 06
ANSI/EIA-649, "National Consensus Standard for Configuration Management," 6 Aug 98
MIL-HDBK-61A, "Configuration Management Guidance", 7 Feb 01 (see Appendix D entitled "ECP Management-Guide")

11.12. 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.

11.13. Lessons Learned

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

11.13. B. The time frame for processing varies greatly from urgent safety related ECPs to routine ECPs/VECPs. Most ECPs require 60 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-61A, 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 cannot be overstated.

11.13. 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.

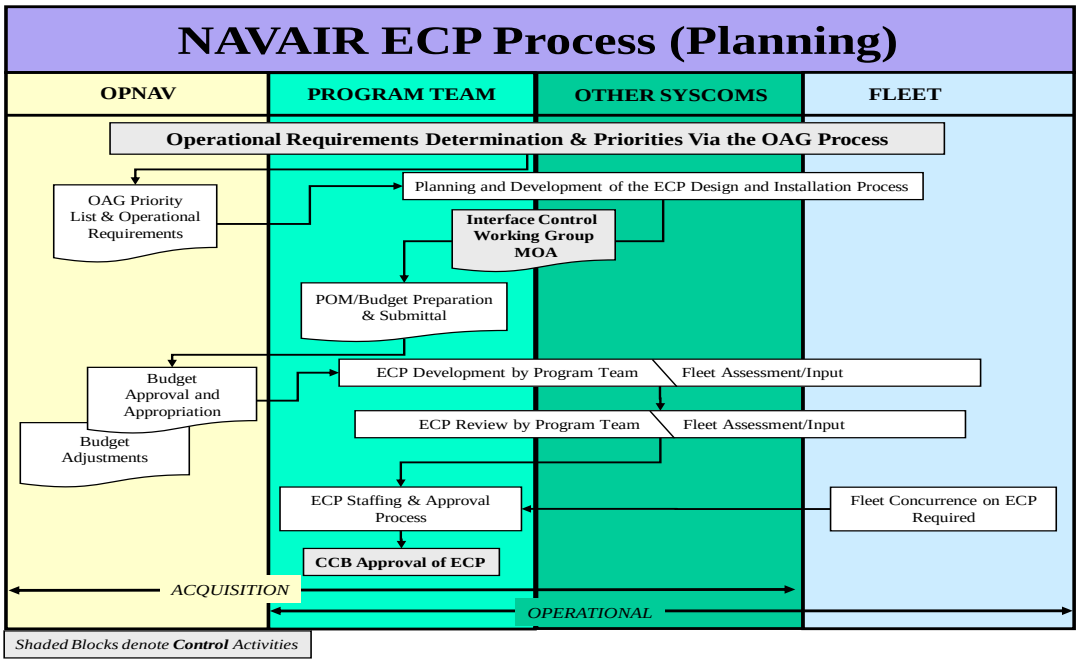
11.14. "**Two-Part ECP Process**" has been introduced to reduce the average ECP/modification cycle-time from initial funding to the last modification installation without sacrificing CM process integrity and discipline.

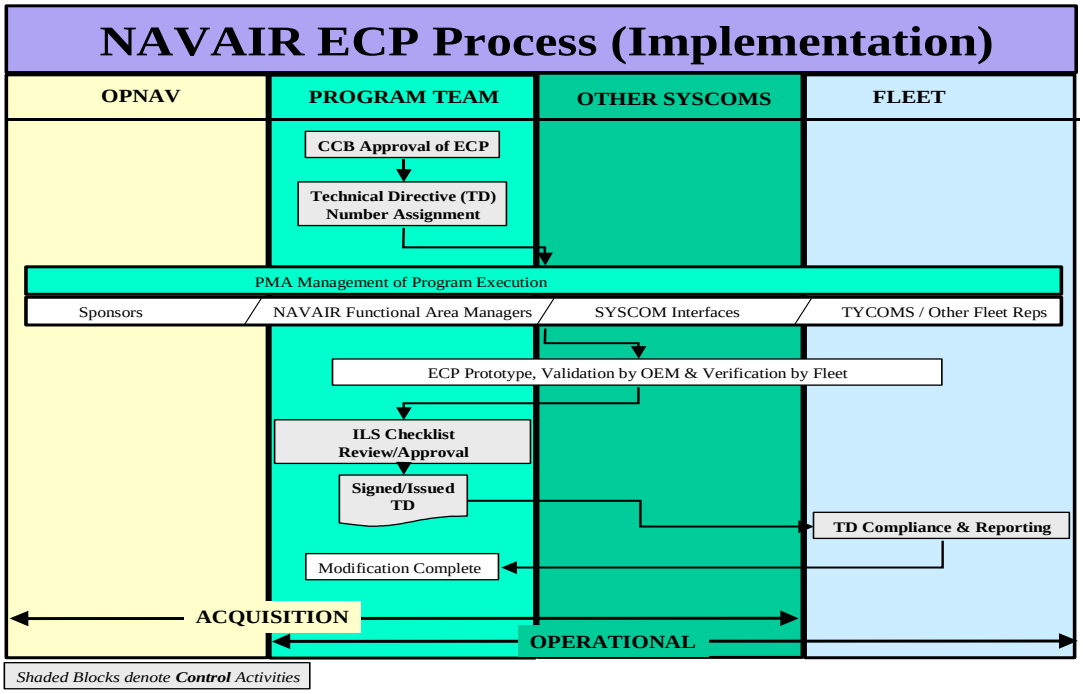
The Two Part ECP process allows PMs to obligate funding for specific non-recurring (NR) services and/or deliverables prior to the actual receipt and approval of a Major (Class I) ECP. Prior to implementation of this process, a complete formal ECP was required to be submitted and approved prior to the release and obligation of any funding. The Two-Part ECP process will yield benefits to both government and industry by permitting shorter cycle times through earlier contractual commitment. Early NR activity will also lead to a higher quality formal ECP resulting in fewer changes and quicker processing.

"**Pre-PBL (Product Baseline) Aviation Weapon Systems Process"**
Configuration items used in supporting fielded aviation weapon systems prior to pre-production baseline requires authorization from the NAVAIR Configuration Control Board (CCB) prior to modifying more than one such configuration item. The purpose of this effort is to track and manage major changes incorporated into pre-production baseline systems. Changes that occur on Pre-PCA systems are documented via a letter from the Contractor to the Program Office then utilizing the NAVAIR Configuration Control Board process through the NAVAIR e.Power Workflow system to assign a Technical Directive number. This will allow a Contractor Field Mod team to incorporate necessary modifications to fielded aviation weapon systems during any convenient down time as agreed with the cognizant operational organization.

11.15. 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.

11.16. POC: Daniel K. Christensen, Division Head, Program Management, Configuration/Data Management Policy and Processes Division AIR-1.1.3, (301) 757-8065


NAVAIR ECP Process (Planning)
OPNAV
PROGRAM TEAM
OTHER SYSCOMS
FLEET
Operational Requirements Determination & Priorities Via the OAG Process
OAG Priority List & Operational Requirements
Planning and Development of the ECP Design and Installation Process
Interface Control Working Group MOA
POM/Budget Preparation & Submittal
Budget Approval and Appropriation
Budget Adjustments
ECP Development by Program Team
Fleet Assessment/Input
ECP Review by Program Team
Fleet Assessment/Input
ECP Staffing & Approval Process
Fleet Concurrence on ECP Required
CCB Approval of ECP
ACQUISITION
OPERATIONAL
Shaded Blocks denote Control Activities


NAVAIR ECP Process (Implementation)
OPNAV
PROGRAM TEAM
OTHER SYSCOMS
FLEET
CCB Approval of ECP
Technical Directive (TD) Number Assignment
PMA Management of Program Execution
Sponsors
NAVAIR Functional Area Managers
SYSCOM Interfaces
TYCOMS / Other Fleet Reps
ECP Prototype, Validation by OEM & Verification by Fleet
ILS Checklist Review/Approval
Signed/Issued TD
TD Compliance & Reporting
Modification Complete
ACQUISITION
OPERATIONAL
Shaded Blocks denote Control Activities

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. NAVAIR Instruction 4200.39C is the governing instruction for all NAVAIR led best value negotiated, competitive acquisitions under Federal Acquisition Regulation (FAR) Part 15.

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 engineering and manufacturing development (EMD)). 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 contract to more than one offeror. Then, conduct a limited competition down-select to one contractor at the end of the TD phase to execute the EMD phase contract. 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 Manufacturer (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. Production competition frequently requires competitors to build the same system and to share data and know-how through licensing agreements or other means. This often results in contractors teaming with one another, enhancing the maintenance capabilities of competing entities.

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

- Funding
- Market Research
- Acquisition Strategy
  - Sole source
  - set aside
  - full and open competition
  - small business participation
- Milestone Decision Status
- Contract Type/ Duration
- Schedule
- Requirements

  - Technical
  - Services
  - Security
  - Environmental
  - Logistical
- Configuration management
- Technology transfer
- Non-Developmental/Commercial Items
- Contractual arrangements
- Second source qualifications
- Conversion from CFE to GFE

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 5000.02 DoD Policy Memorandum Subject: Department of Defense Source Selection Procedures dated Mar 4, 2011, NAVAIRINST 4200.39C, and various implementing Navy and NAVAIR instructions, including SECNAVINST 5000.2E. See also the Navair Acquisition Timeline Website, https://mynavair.navair.navy.mil/portal/server.pt/community/acquisition_timeline/1496 for more information.

12.5. Summary. Competition offers substantial benefits but must be carefully manage to obtain all objectives on schedule. Competition planning must be an integral part of the overall acquisition strategy. It 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 as an outgrowth of an Acquisition Strategy that must be approved and followed. Initially, a requirement must be identified and funding must be obtained. Requirements may include aircraft, missiles, 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. In addition, key personnel need to be identified. A myriad of documentation that justifies and plans the acquisition must also be developed and approved. Market research must be conducted to identify industry sources that should then be polled for input into both the feasibility of the requirement and the strategy for fulfilling the requirement. A draft specification, Statement of Objective/Statement of Work (SOO/SOW) or Performance Work Statement (PWS), and eventually the entire Request for Proposal (RFP) should be sent to Industry for comment. The Draft RFP may be sent to Industry without its Sections L&M, but eventually a draft of 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 for 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 a Draft RFP to Industry for comment is included the program/source selection schedule. Ultimately the 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 to complete these source selection efforts on schedule. Essential Source Selection training is available on the Acquisition Timeline Web Site https://mynavair.navair.navy.mil/portal/server.pt/community/acquisition_timeline/1496: choose the "Competitive Source Selection" hyperlink, or through Source Selection and Contracts POCs listed in these chapters.

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 SOW/SOO or PWS, 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. RFP Sections L&M are critical documents that set the path towards an unambiguous, fair, and trouble free selection. Section M identifies what will be evaluated. Section M, Evaluation Factors for Award is commonly referred to as the Evaluation Criteria. Section L instructs what the Offerors is to provide in the proposal in response to the RFP, as well as where and how to provide it. 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/SOW

or PWS, Specification, other requirements, Work Breakdown Structure (if applicable), and Section B (CLINs).

2) The following actions should occur at this meeting:

a) Start with training on how to develop Section L and M and review definitions of Source Selection terminology.
b) Conduct a brainstorming session to identify the key evaluation discriminators.
c) Organize the discriminators into Factors, Sub-Factors, Elements and Sub-Elements (as needed).
d) Draft Section M based on the results of the meeting, using the Section M Clause Book Template as a guide or AIR-4.10E Source Selection Office provided examples. Templates can be found on the NAVAIR AIR-2.0 website (https://contracts.navair.navy.mil/index.cfm)
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.

3) In developing Section L, use the Section L Clause Book or AIR-4.10E Source Selection Office provided examples as a guide. 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 Instructions 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 RFPs of similar programs. Templates can be found on the NAVAIR AIR-2.0 website (https://contracts.navair.navy.mil/index.cfm).

4) Develop a Cross Reference Matrix (CRM) that relates each Section L, Part B, specific proposal instruction to the various program requirements and specifications (document name, paragraph, DOORS entry, etc.). This CRM becomes part of Section L, but should also be used as a tool to identify disconnects between the Proposal Instructions and the requirements. The CRM will also be used to help identify evaluator assignments, generate evaluation worksheets and guide evaluators during the evaluation.

5) In general, the Source Selection Evaluation Board (SSEB) and other key program members should meet on a weekly basis from this point on in order to manage the process.

6) 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 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.)

7) After the SSEB 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 Sections 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 the 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, and do not require SSAC or SSA concurrence.

12.8.D. An important part of planning for an evaluation that has no (Secret or higher) classified requirements is setting up a limited access computer share folder and scheduling the use of a proposal evaluation room that is suitable for securing Source Selection Information. Please note that AIR-4.10E has limited facilities for

evaluating classified proposals and has no classified computers or SIPRNet connections. (Contact Linda Carrico to schedule AIR-4.10E managed evaluation rooms and to aid in setting up share folders.)

1) Because of the competitive nature of Source Selections (and because it's the law), Source Selection Information must be kept secure with limited access to only those persons with a need to know, and who have signed a non-disclosure agreement. Share folders should be set up early in the process to facilitate development of the RFP, particularly Sections L&M, and evaluation planning documents 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 and electronic storage of the proposals. The share folder is where evaluators will document and store their findings (Evaluation Worksheets) and where various other documents (e.g. Evaluation Notices and replies, the SSEB Report, and Evaluation briefings) can be processed and filed.

2) Scheduling of evaluation rooms should occur as soon as the time of the evaluation and the number of evaluators can be reliably predicted. Evaluation rooms managed by AIR-4.10E are limited and are not available for every program. In the event that 4.10E evaluation spaces are not available, the Program Office is responsible to find other secure evaluation facilities.

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

1) Expiration date of existing contract
2) Acquisition Plan/MOPAS approval
3) Funding cycles
4) Expected number of proposals
5) SSEB review of the RFP
6) Release of a draft RFP with Sections L&M to industry for comments;
7) Legal Review Board - a 2 week Legal Counsel review of the RFP;
8) 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;
9) Peer Reviews and other "uptown" approvals
10) RFP release (1-2 days after the SSAC/SSA Meeting); and
11) Proposal receipt - 45-60 days after RFP release.
12) Discussions
13) Business Clearances/ Contracts Administration Work
14) Contract Award
15) Contract handover

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, Corporate Experience, Cost/Price training for Team Leaders and Evaluators. Source Selection Overview Computer Based Training, Module One, General Evaluator Training, Module Two, Technical Evaluator Training, Module 3, Source Selection Considerations for SSAs and SSAC Members, Module 4, Past Performance Overview, Module 5a, and Past Performance Evaluation – Collecting Past Performance Info, Module 5b, are now available on the NAVAIR Acquisition Timeline. Module One training should be viewed early in the RFP development process to help ensure that the RFP integrates evaluation considerations, resulting in an aligned acquisition and evaluation strategy as well as technical requirements that are good standards for the evaluation.

12.8.G. When developing the evaluation schedule, a low risk schedule should consider an 8 to 12 month process time from proposal receipt through contract award and is dependent upon whether or not external (ASN or OSD) peer reviews are required. Consider the complexity of the evaluation, the number of Offerors, the need for Peer Reviews, and process time historical metrics when establishing the schedule. ASN Peer Reviews are required for Services Procurements over $250M. For any procurement over $1B an OSD Peer Review is an additional requirement, which is also coordinated through ASN. Peer Reviews are accomplished to provide advice at Final

RFP Release, Prior to closing Discussions, and Prior to 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.H. 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. If serving 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 Expense Operating Budget (EOB) funded source selection experts and exists as a valuable resource to NAVAIR. However, due to the limited number of people in the SSO it is best to give the SSO Director/Deputy 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	Program Team Lead & PEO(U&W)/AIR-1.0 Coordinator	" 757-1807
Tom Popp	Program Team Lead & PEO(T)	" 757-1805
Christine Hill	Program Team Lead & PEO(A)	" 757-7101
Linda Carrico	Management Assistant	" 757-1811

CHAPTER XII: COMPETITION & SOURCE SELECTION

PART C: PAST PERFORMANCE, CORPORATE EXPERIENCE, & BEST VALUE

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

12.11. Discussion

12.11.A. Past performance confidence 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 4200.39C. 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 technical (quality of product), cost, management, utilization of small business, and adherence to established schedules. Program Managers should note that their due diligence in completing accurate and clearly written CPARS on existing contracts is critical to the effectiveness of a Past Performance evaluation. In turn, contractors will be incentivized to receive good CPARS ratings because they will know that their performance on existing contracts will be evaluated during the next competition.

12.11.B. Past Performance is a unique factor where the confidence in the Offeror's future performance is assessed based on the capability it demonstrated through performance on similar past work. Corporate Experience is another factor where the confidence in the Offeror's future performance is assessed based on the capability it demonstrated through past work. The difference is that Corporate Experience assesses **whether** the offeror has performed similar work in the past, while Past Performance assesses **how well** the offeror has performed similar work in the past. As stated, these factors assess the offeror's capability, and help to assess confidence in how the Offeror will perform in the future. The difference between Past Performance/Corporate Experience, and Technical/Cost/Price is that Technical/Cost/Price are proposal evaluations that assess the Offeror's promises while Past Performance and Corporate Experience assesses the Offerors capability based on current and previous work.

12.12. Summary. Past Performance and Corporate Experience adds a unique insight into the Government's ability to select best value by going out of the proposal and into the offeror's past. These factors are based on what the offeror has done in the past vice whatever promise they can propose. The offeror can propose and change its promises, but cannot propose or change its past. NAVAIR will continue in future evaluations to develop the best method of using Past Performance, Corporate Experience and other criteria in the source selection process.

12.13. SSO POCs:

Alan Goldberg	Director	(301) 757-1810
Kevin Kennedy	Deputy Director	" 757-1806
Jim Stanford	Program Team Lead & PEO(U&W)/AIR-1.0 Coordinator	" 757-1807
Tom Popp	Program Team Lead & PEO(T)	" 757-1805
Christine Hill	Program Team Lead & PEO(A)	" 757-7101

CHAPTER XIII: ACQUISITION LOGISTICS SUPPORT

PART A: PROGRAM MANAGEMENT RESPONSIBILITY AND THE ROLE OF THE PRODUCT SUPPORT MANAGER

Per DOD 5000.1, the PM [Program Manager] shall be the single point of accountability for accomplishing program objectives for total life cycle systems management, including sustainment. PMs shall consider supportability, life cycle costs, performance, and schedule comparable in making program decisions. Planning for Operation and Support and the estimation of total ownership costs shall begin as early as possible. Supportability, a key component of performance, shall be considered throughout the system life cycle.

The tenets of life cycle management emphasize an early focus on sustainment within the system life cycle. Life cycle management is the implementation, management, and oversight, by the designated Program Manager (PM), of all activities associated with the acquisition, development, production, fielding, sustainment, and disposal of a DoD system across its life cycle. It empowers the PM as the life cycle manager with full accountability and responsibility for system acquisition and follow-on sustainment. Life cycle management concepts are now policy and have been initiated to provide more effective, affordable, operationally ready systems through increased reliability, supportability, and maintainability. The PM is also responsible for ensuring, throughout the system life cycle, that the sustainment strategy is both regularly assessed and in full compliance with applicable statutory requirements in Title 10, United States Code.

Life Cycle Management (LCM) is defined as the designated PM's implementation, management, and oversight of all activities associated with the acquisition, development, production, fielding, sustainment, and disposal of a DoD system across its life cycle. Under LCM, the PM, with support from the PSM for sustainment activities, is responsible for the development and documentation of an acquisition strategy to guide program execution from program initiation through re-procurement of systems, subsystems, components, spares, and services beyond the initial production contract award, during post-production support, and through retirement or disposal.

PMs pursue two primary support objectives. First, the weapon system must be designed to be supportable and reduce the demand for product support. Second, product support must be effective and efficient. The resources required to provide product support must be minimized while meeting Warfighter requirements. When developing and implementing a product support strategy, the goal is to balance and integrate the support activities necessary to meet these two objectives. LCM is therefore the implementation, management, and oversight, by the designated PM, of all activities associated with the acquisition (such as development, production, fielding, sustainment, and disposal) of a DoD weapon system across its life cycle. LCM bases major system development decisions on their effect on life cycle operational effectiveness and affordability. LCM responsibility encompasses, but is not limited to, the following:

- Single point accountability (the PM, with direct support from the PSM) for developing and delivering program product support objectives including sustainment
- Development and implementation of product support strategies
- Documentation of product support strategies in the Life Cycle Sustainment Plan
- Continuing and regular reviews, revalidation, and update of product support and sustainment strategies, including the LCSP and the Business Case Analysis (BCA)

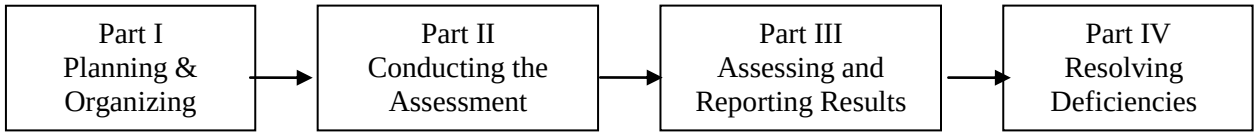
The PSM, acting as the PM's agent, is responsible for developing and implementing a comprehensive product support strategy and for adjusting performance requirements and resource allocations across Product Support Integrators (PSIs) and Product Support Providers (PSPs) as needed to implement this strategy. Furthermore, the PSM's responsibility carries across the life cycle of the weapon system by requiring the revalidation of the business case prior to any change in support strategy or every five years, whichever occurs first. The PSM will utilize resources available, including Product Support acquisition guidance, appropriate planning and management techniques, pre-defined supportability and business-case analysis tools and routine progress assessment activies in order to acquire, develop and deliver a comprehensive product support strategy consistent with the Program Managers total life cycle sustainment responsibility. Some of the key products and activities are described further, below.

PART A: INDEPENDENT LOGISTICS ASSESSMENT (ILA) PROCESS FOR MILESTONES B, C AND FRP AND POST FRP ASSESSMENTS

13.1. Per SECNAVINST 4105.1 Series, "ILA and Certification Requirements," individual Program Executive Officers (PEOs) and Systems Command (SYSCOM) Commanders are responsible for ensuring that an ILA is accomplished on all ACAT programs prior to Milestones B, C and the Full Rate Production (FRP) decision. In NAVAIR, AIR-6.0 has been designated as the agent to conduct ILAs in support of the NAVAIR PEO's and the SYSCOM Commander. The outcome is a certification of the status of the Integrated Product Support (IPS) elements prior to the milestone decision and base the certification on the results of the ILA as documented in a formal, written report. Results of these assessments should also be a primary input into the related gate decision meetings as defined in SECNAVINST 5000.2E for those programs subject to the two pass/six gate review process.

Your entry point into the ILA process is AIR-6.0T. Individuals within AIR-6.0T will provide you with necessary tools such as the ILA handbook, ILA briefing template, and ILA checklist.

The assessment process is designed to provide input to the PEO and the Milestone Decision Authority (MDA) for their oversight and decision making processes. Perhaps, most importantly, it is to provide help to the APML by bringing together a team of subject matter experts that can provide valuable insight and recommendations regarding the development of the supportability program. Consequently, the timeframe between assessments should never exceed five years. If the timeframe between milestones or the FRP decision exceeds five years, an ILA shall be conducted prior to the five-year mark and, if possible, coincide with major systems engineering reviews such as the Critical Design Review or Production Readiness Review (PRR).



This handbook is divided into four parts to coincide with the four process steps identified above. The ILA will be conducted per the above process and use an independent team of subject matter experts. Each part provides detailed guidance to the program team, the ILA Team Leader and ILA team members on completing that portion of the ILA process as well as respective responsibilities to assist participants in completing ILA functions.

Timeframes for ILAs

As stated in the SECNAVINST 4105.1C and this document, ILAs are scheduled prior to milestones B, C and the FRP decision in a time frame that allows the report to be disseminated to the stakeholders and decision makers prior to any milestone decision meetings. The ILA process at NAVAIR is approximately a nine month evolution. The assessment takes about two months and the time required to vet the ILA report through the APML, APEO(L), PMA, AIR-6.0 and the PEO is about two months. The process builds into this schedule adequate time for the APML and program office to resolve as many issues as possible prior to the report being finalized; consequently the process is about 9 months. The overall timeframes are as follows:

ACTION	**TIMEFRAME**
Initial meeting btwn APML & ILA Team Leader (TL)	~ 24 months prior to the Kick- off
APML & IPT meet with ILA TL and SMEs	18 – 24 months prior to the Kick- off meeting

Goals:
Familiarization with the ILA process.

SMEs explain their part of the supportability process and documentation requirements that the APML will need to navigate in order to plan for, budget for, and contract for in order to deliver the support system at the right times.

APML and IPT continue to meet the SMEs who can provide valuable insight into the efforts they need to accomplish to develop a successful program.

Document preparation	start 18 – 24 months prior to the Kick- off meeting

Kick-Off Meeting	9 Months prior to milestone
Assessment Period – initial look	Months 9 – 8 prior to milestone
Correction of documentation / correction of deficiencies and SME approval / final report input	Months 8 – 5 prior to milestone
Final Report Reviewed by Assessors & APML APEO(L) Program Senior AIR 6.0 Leaders (ILA Board)	Months 5 – 3 prior to milestone
AIR 6.0 Signature	Months 2 - 3 prior to milestone
PEO Signature	Months 2 - 3 prior to milestone
Report sent to DASN (E&LM)	No later than 1 month prior to MS
MILESTONE DECISION	**Month 0**

Relationship of ILAs to Other Assessments

There are also several other assessments and reviews between milestones, such as the Systems Engineering Technical Reviews (SETRs) that feed into the milestone and gate decisions. These assessments and reviews should be considered when scheduling the ILA, since information from the different assessments can complement each other. For example, the Preliminary Design Review (PDR), when scheduled prior to milestone B, can provide useful information from the contractor's IPS planning to the ILA team. This is also true for the Milestone C ILA which may occur during the same time frame as the Critical Design Review (CDR) or Production Readiness Review (PRR). While these SETRs assess the contractor's planning and ILAs assess the program office's planning, the teams should share information since data available to one team may not be readily available to the other. Additionally, the information from the ILAs should be used as the primary input to the corresponding Gate Review. The Milestone B ILA would typically correspond to the gate four, while the Milestone C and FRP ILA would normally support gates five and six respectively. The input into the Gate Review process can be that the ILA is underway and that so far the assessment is indicating issues in specific areas.

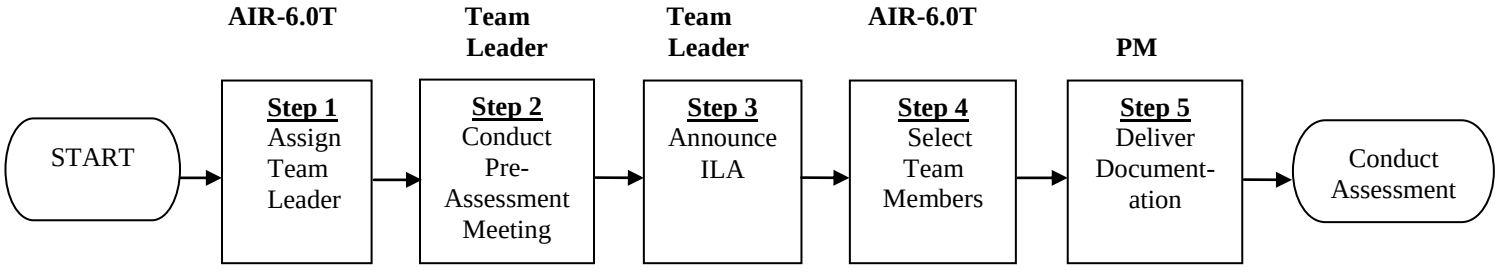
Post-FRP Phase ILAs are an addition required by SECNAVINST 4105.1C. This process is under construction, but the goal is to insert the POST FRP module into existing process, such as Weapons Readiness Reviews, and Program Management Reviews. The requirements and checklist questions are part of the ILA handbook. The Post-FRP Phase ILAs will commence two years after FRP and will repeat every five years after that.

13.2. PART I: Planning and Organizing

13.2.A. Objective

The objective of the Planning and Organizing Part is to ensure the required preparation takes place in sufficient time to properly initiate the ILA.

13.2.B. Process



13.2.C. Process Description

Step 1 - Select Team Leader

AIR-6.0T is designated by AIR-6.0 as their agent to manage the ILA process. AIR-6.0T personnel are designated as the qualified team leader along with the competencies providing qualified members to establish an assessment team.

Step 2 - Conduct Pre-Assessment Meetings

The team leader conducts pre-assessment meetings with the APML and program manager, or designee, addressing the following:

1. Confirm the responsibilities of the program office, team leader and team members;
2. Confirm the purpose, scope, and timing of the review;
3. Discuss specific review procedures;
4. Coordinate the availability and location of IPS and program documentation;
5. Discussions between SMEs and program team regarding tasks and documentation required by IPS elements, such as maintenance planning efforts, etc;
6. Discussions regarding tailored listing of IPS and program documentation;
7. Clarify specific logistics assessment schedule of events/agenda;
8. Identify the location of all assessment activities;
9. Identify program office personnel to respond to ILA team member questions;
10. Identify security requirements and arrangements, as well as access to classified material;
11. Discuss the conduct of the assessment, including program office responsibilities to develop a program brief (Kick off brief);
12. Discuss the issuance of draft and final reports;
13. Discuss post-review procedures to include follow-up on identified issues;
14. Discuss certification criteria and rating process;
15. Discuss issuance of an IPS certification letter (certification letter stating the IPS program to be fully, conditionally, or not certified), and
16. Rationale for not reviewing a specific ILA element.
17. Discuss the program completing the ILA checklist as a self assessment tool and a product useful to the SMEs.

There may be multiple pre-assessment meetings leading up to step 6, the kick off meeting. These meetings may have the following objectives and timeframes:

1. 18 – 24 months prior to step 6 (Kick- off meeting) - APML and associated team members meet with the ILA Team Leader and SMEs. The purpose for this meeting are:
    a. Familiarization with the ILA process.
    b. SMEs explain their part of the supportability process and documentation requirements that the APML will need to navigate in order to plan for, budget for, and contract for in order to deliver the support system at the right times.
    c. APML and associated team members meet the SMEs who can provide valuable insight into the efforts they need to accomplish to develop a successful program.
2. Add-hock meeting between the APML and associated team members and the SMEs after the initial meeting above. The purpose it to further explore and understand the supportability process and documentation requirements.
3. Add-hock meeting between the APML and associated team members and the ILA Team Leader to discuss progress toward being prepared for the Kick- off meeting. Principally, the ILA Team Leaderwill want to ensure that the APML will have the necessary documentation available and prepared to a level of detail necessary to support the ILA process. If the documentation is not to a level necessary to conduct an ILA, then the ILA Team Leader may recommend to the APEO(L) that the kick-off meeting (step 6) be delayed. This will also require an commensurate shift in the milestone date.

Step 3 - Announce ILA.

AIR-6.0T announces the upcoming ILA, stating the dates of the ILA, the scope, requesting the competencies to identify team members, identification of where documentation is located, meeting site, schedule, agenda, security, and Point of Contact (POC) information. This announcement should be distributed to the participants and stakeholders

(below) at least four weeks prior to the start of the ILA.

- For Navy ACAT I and II programs, stakeholders are Deputy Assistant Secretary of the Navy (Acquisition and Logistics Management) (DASN(E&LM)), the respective Product DASN (PDASN), Chief of Naval Operations (N1, N4, N40, N45, N09), and Naval Facilities Engineering Command (NAVFAC).
- For Joint programs, in addition to the Navy and/or Marine Corps stakeholders, other services should be afforded the opportunity to participate in the ILA and be provided courtesy copies of ILA report(s) to their PEO and/or Acquisition Executive.

Step 4 - Select Team Members

The team leader is responsible for ensuring that the competencies provide team members, also known as subject matter experts (SMEs) or assessors. AIR-6.0T maintains a list of SMEs that will generally participate. Team leader and team member qualifications are identified in Table 1 below:

Table 1. ILA Team Qualifications

Qualification	Team Leader (Government Employee)	Team Member
Independence:	Must be independent of the program. Not active nor has been recently active in the management, design, test, production or logistics planning of the program, whether from the program office, supporting field activity, or a member of a contractor activity.	Must be independent of the program. Not active nor has been recently active in the management, design, test, production or logistics planning of the program, whether from the program office, supporting field activity, or a member of a contractor activity.
Experience:	Participation in at least one ILA as a team member.	Must have experience in the functional area being assessed.
Education:	Defense Acquisition Workforce Improvement Act Level III	Defense Acquisition Workforce Improvement Act Level II or equivalent certification.

Step 5 - Deliver Documentation

The program office shall provide requested documentation to the ILA Team Leader as previously agreed to, but typically at least one week before the opening brief. Documentation should reflect the most current version identified during the pre-assessment and subsequent meetings. The Documentation Request List, (Appendix A) of the ILA Handbook, outlines typical documentation requirements that should be tailored for each ILA during the pre-ILA meeting to reflect program specifics and the upcoming milestone. The scope and depth of logistics support information in these documents can vary significantly from program to program and by acquisition phase. Some programs may be in a source selection process, or have sensitive/proprietary data issues. Team leaders need to identify team member information (e.g., Government, contractor) to the program office to verify if there are sensitive/proprietary data issues and ensure non-disclosure agreements are completed as required. Support contractor personnel should not be disqualified from participating as ILA team members if the proper disclosures are followed and they are not from a competing/interested source.

13.2.D. Process Deliverables

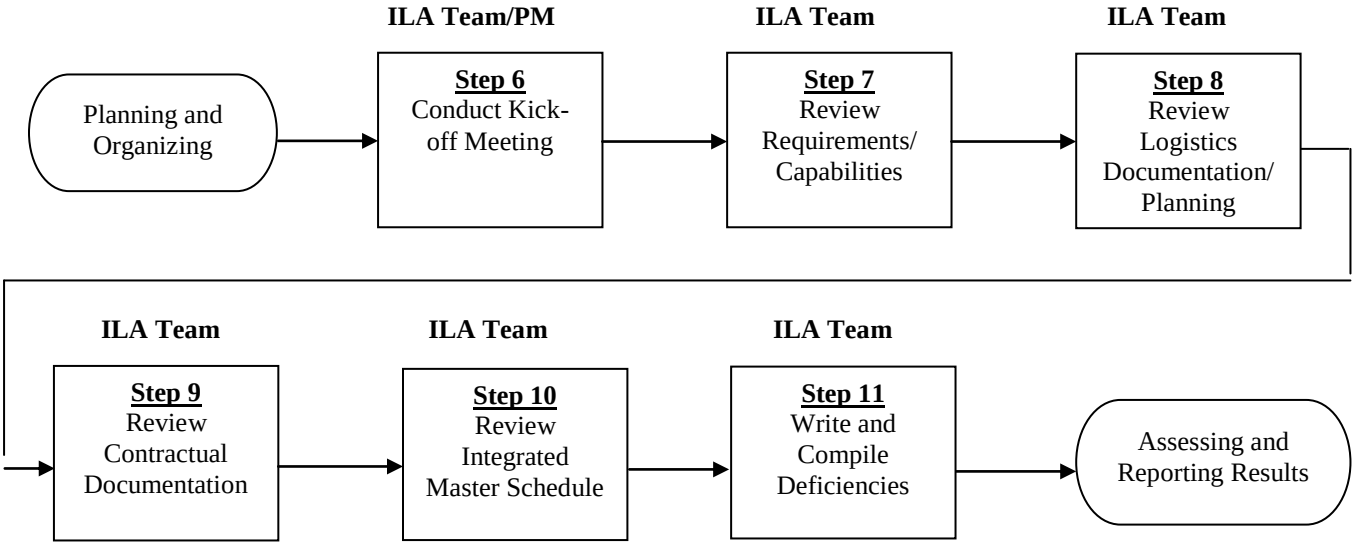
- ILA Team member listing;
- APML / IPT Team member listing;
- APML completed ILA checklist;
- APML kick-off briefing;
- ILA announcement/schedule, and
  Program Documentation.

13.3. PART II - Conducting the Assessment

13.3.A. Objective

Part II identifies the basic methodology for conducting a successful ILA and provides standard assessment criteria for use. These criteria are neither platform nor system specific; rather, they are critical evaluation factors, which should be tailored/augmented to the specific program being assessed. Individual ILA team members will conduct their assessments using the criteria contained in the NAVAIR ILA Checklist, which is a compoliation of the SECNAV and NAVAIR specific questions.

13.3.B. Process



13.3.C. Process Description

Step 6 - Conduct Opening Meeting
The opening meeting (Kick-off meeting) provides the logistics assessment team with a foundation of information regarding program background, current status, logistics structure and a review of what is expected during the assessment. It is important to recognize that assessment team members are not familiar with the subject program and the opening briefs are the best opportunity to impart the needed information/background to understand the program in its proper context. The opening briefs consist of the following:

Program brief. The purpose of the program brief, normally presented by the program manager or the deputy program manager, is to impart a basic understanding of the acquisition program. It should address:

1. General description of the system, physical as well as functional
2. Scope of the LA (a clear description of the scope of the program being assessed, including hardware/software elements)
3. System interfaces
4. Planned operational use of the system
5. Support strategy, e.g., Life Cycle Sustainment Plan (LCSP), including unique considerations and

performance objectives, metrics, supportability requirements and assessment strategy
6. Hardware if available
7. Current status of the program, including any pertinent history and program peculiarities
8. Size of the program in terms of number of units and dollars
9. Delivery schedules (end items and support elements)
10. Program funding status
11. Organizational structure of the program office
12. Acquisition and sustainment strategy, including contract status and milestones
13. Status of the program's documentation (outstanding items from the documentation request)
14. Program office and logistics points of contact
15. Identification of any developing or signed Program Manager Warfighter Agreements and Performance Based Agreements (PBAs)
16. Identification of any Memorandum of Agreement/ Understanding (MOA/MOU), Expectation Management Agreements, etc. with participating or supporting organizations

Logistics brief. The logistics brief, normally presented by the program's PSM or APML , addresses each of the areas of supportability that will be reviewed by the logistics assessment team. The ILA Team Leader will provide a formatted PowerPoint presentation that the APML can populate with specifics for the program. At a minimum, it should address:

1. Structure of the program support organization
2. Status of supportability documentation (e.g., approval status)
3. Contracting approach
4. Results of any Business Case Analyses (BCA)
5. Support agreement strategy and status (e.g. extent of Performance Based Logistics (PBL) life cycle support (industry/organic) and associated BCAs)
6. Top-level schedules and milestones for each IPS element, including detailed support/PBL strategy
7. Status of detailed supportability tasks, schedules and milestones tied to the Integrated Master Schedule (IMS) and LCSP for each IPS element
8. Logistics and program risk assessment
9. Life Cycle Cost Estimate (LCCE)
10. Names and phone numbers of program office counterparts
11. Budgets (identifying the required, funded and delta amounts) for each IPS element
12. Data rights requirements and options pursued/ obtained to ensure logistics supportability products and infrastructure can be developed
13. Product Support Arrangements
14. Any other special interest items

ILA Team brief. The purpose of this brief, presented by the ILA team leader, is to provide information to the ILA team members and program personnel on the conduct of the review. This brief should address the following:

1. A review of the responsibilities of the team leader and team members;
2. Specific logistics assessment schedule of events/agenda;
3. Instructions on documenting deficiencies and desired format;
4. Guidance on determining the timeframe in which recommended actions need to be completed, and
5. Post-review follow-up and certification procedures.

Step 7 through step 11are the heart of the assessment process. While the ILA Team Leader and SMEs / Assessors are the leads in these steps in the process, the APML and team members are equally involved. There should be constant communication between the ILA Team Leader, SMEs / Assessors and the APML and team members.

Step 7 - Review Requirements/Capabilities
User needs and capabilities form the basis for the support system performance requirements.

Review the basic program requirements, including: Performance Agreements, Key Performance Parameters (KPPs) and critical system parameters in the Initial Capabilities Document (ICD), CDD and CPD, depending on the program phase, and the Acquisition Plan (AP) or Acquisition Strategy (AS).
Step 8 - Review Logistics Documentation/Planning

ILA SMEs, as the focus of their assessment effort, will review documentation, such as the AS, LCSP, LRFS, and documentation associated with their area of expertise (e.g. Facilities Requirements Document) to determine that planning and budgeting is in place to support the requirements laid out in the requirements document. The LCSP should also provide a mapping to the primary support product/technical documentation, logistics schedules, and be supported by the logistics budget.

Review the Logistics Requirements and Funding Summary (LRFS) and associated funding documents to ensure funding requirements for each IPS element are appropriately identified, funding is available and shortfalls identified. Ensure each IPS element is funded in the year funding is contractually required to produce the support deliverable in the correct timeframe per the IPS IMS.

ILA Criteria Requiring Review. The following assessment criteria require review during an ILA regardless of the support strategy. In addition Product Support Budgeting and Funding, and Environment, Safety and Occupational Health (ESOH) should be assessed as separate elements.

1. Product Support Management
2. Design Interface
3. Sustaining Engineering
4. Supply Support
5. Maintenance Planning and Management
6. Packaging, Handling, Storage and Transportation
7. Technical Data Management
8. Support and Test Equipment
9. Training and Training Support
10. Manpower and Personnel
11. Facilities and Infrastructure
12. Computer Resources and Software Support
13. Product Support Budgeting and Funding
14. Environmental, Safety and Occupational Health

Step 9 - Review Contractual Documentation
Review the contract/tasking to ensure appropriate requirements have been identified.

The solicitation package or contract should be assessed for adequacy of supportability requirements.

Similarly, field activity tasking documents (in place and proposed) should be reviewed to ensure the Government supporting activities are appropriately engaged, tasked and funded.

Step 10 - Review Integrated Master Plan (IMP) and Schedule
Review ILA Element Assessment Criteria against the master program schedule. Review reasonableness of the tasks and likelihood of completion of each IPS task within the allocated schedule and man loading.

A program's overall schedule reflected in the IMS can range from being an imposed schedule to one that has some flexibility. The logistics support tasks for each IPS factor must be planned, scheduled and integrated with other program activities. The sequence and dependencies of one task upon another must be included in determining schedule realism. The integrated master program schedule timelines must be achievable within funding constraints when considering a bottoms-up view of all required detail tasks and their inter-dependencies. The LCSP should contain the detailed Plans of Actions and Milestones (POA&M) for each IPS element for focused IPS management planning/implementation.

Step 11 - Write and Compile Deficiencies
It cannot be stressed too much that the foundation of assessing the program is 1) reading the documentation and 2) communication between the SME and their counterpart on the program team (APML, LEM, etc.) The ILA team leader and team members will conduct their review using the assessment criteria contained in Section 2.4 of the ILA handbook as assigned by the ILA Team Leader. Team members will annotate the criteria being evaluated with any discrepancies, the impact if not corrected, the recommended action(s), and whether the program representative concurs

or does not concur (see Note 1). A summary report of the results of each element assessed, including all deficiencies, will be submitted to the ILA Team Leader. As part of their responsibilities, the team leader must review all issues or discrepancies turned in by the team members, review them for accuracy and ensure the proposed rating given by the team member is commensurate with the rating criteria in this guide. The team leader may change a rating and/or modify the content of an issue if it is felt that the issue and rating are not correct. Only after being vetted by the team leader should issues be formalized. Appendix C of the ILA Handbook provides required ILA Deficiency/Recommendation content, ILA Finding Grading Guidelines.

The draft deficiencies shall be shared with the APML and the SME's program counterpart. This is essential, as communications is paramount to the process. On the other hand, it is just as critical to the ILA process be based on written documentation that forms the program planning and execution process, such as the LCSP, IMS, LRFS or other lower level documentation such as the maintenance plan. A power point presentation is not considered as appropriate documentation on which to base the deficiencies prepared by the SME.

13.3.D. Process Deliverables

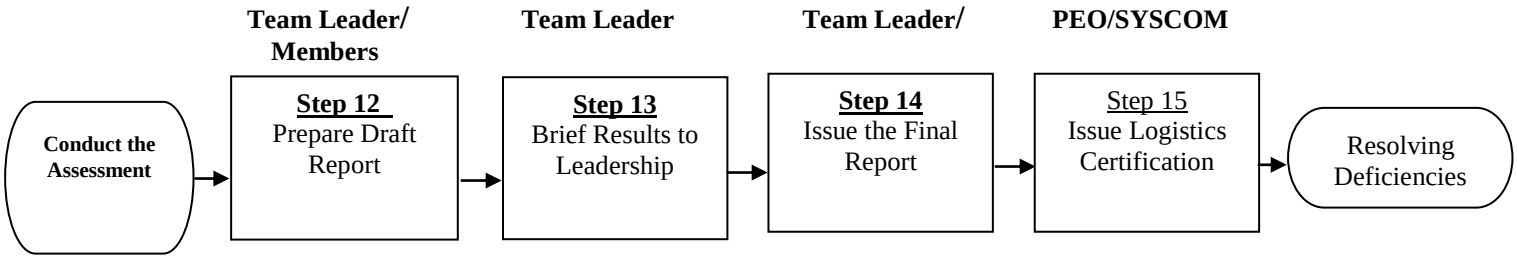
- Draft Deficiencies/Recommendations.

13.4. PART III – Assessing and Reporting the Results

13.4A. Objective

Part III addresses the preparation of the ILA Report, coordination with the program office and submission of the report to the cognizant PEO or SYSCOM. The report will serve as the basis for the IPS certification decision by the PEO or SYSCOM.

13.4B. Process



13.4.C. Process Description

Step 12 – Prepare Draft Report
The ILA report is the responsibility of the ILA team leader in all phases of development. The development of the ILA report is iterative processes in which the draft deficiencies and recommendations discussed above are shared with the APML and program office as part of the communication process. The contents of the draft ILA report should not come as a supprise to the APML or the program team. Some of the more important steps in the preparation of the draft ILA report include.

Note: 1 Periodic Progress Briefs are to be conducted during the ILA at a time agreed upon by the Team Leader and the program office representative. The purpose is to brief the program office of any issues noted during the assessment as well as to resolve any remaining issues from previous progress briefs. During these briefs, the ILA Team Leader will:

- Discuss new issues with the program manager or authorized representative;
- Obtain the program manager's or authorized representative's concurrence or non-concurrence on each deficiency as well as on the team leader's logistics certification recommendation, and
- Follow-up on open issues from previous progress briefs, as necessary.

1. Team Leader reviews the draft deficiencies through the entire process and steps in to address differences between the ILA team members and the program team.
2. Team Leader reviews the draft deficiencies for appropriate risk ratings using the Green, Yellow or Red Rating using the Consequence and Likelihood Decision Tables and accompanying ILA Risk Matrix in the ILA handbook.
3. Provide the draft report for review by the SME.
4. Provide the draft report for review by the ILA Branch Head and AIR-6.0T.
5. Provide the draft report for review by the APML and the logistics team.
6. Provide the draft report for review by the ILA Branch Head and AIR-6.0T.
7. Provide the draft report for review by the APEO(L).
8. Assessment Criteria areas without deficiencies will be documented in the back of the report.
9. Careful consideration of all outstanding deficiencies and their associated risk will be used to develop the overall logistics program certification recommendation.
10. In general, if there are major deficiencies that cannot be corrected prior to the issuance of Logistics Certification or the Milestone Decision, the rating should not be "Green." The team leader should brief the program manager prior to release of the final ILA Report on each deficiency and recommendation as well as the team leader's recommendation for logistics certification.

The report must reflect a clear distinction between issues requiring resolution prior to the milestone decision and issues that may be resolved after the milestone at specific timeframes (e.g. prior to contract award or release of the request for proposal, or prior to Fleet introduction or operational evaluation, etc.). As the report is being drafted, the Program Manager provides a formal POA&M to address each deficiency identified in the ILA report. POA&Ms should be submitted and included in the final report, if possible. If they are not finalized prior to issuance of the final report, they will be provided to the team leader at a mutually agreed to time. All proposed actions should address funding availability and support overall program milestones. The team leader, in consultation with respective team members, shall review and respond to the proposed POA&Ms, ensuring adequacy and appropriateness of the planned actions.

Step 13 – Brief Results to Leadership.
The team leader ensures that the draft ILA report that is prepared for signature is taken through a series of reviews by senior leaders to:

1. Provide a forum where the program office and the ILA team can address difference they may have regarding the contents of the report or its conclusion and;
2. Ensures that leadership agrees that the report appropriately states the outcome of the assessment and the associated recommendations to the PEO and the milestone decision authority (MDA).

The reviews are generally as follows:

ILA Board – AIR-6.6, AIR-6.7 and AIR-6.8 senior leadership. Also included are the APEO(L) and AIR-6.0T leadership. Depending on the gravity of the deficiencies and the ACAT level, this meeting may be achieved either virtually via e-mail or a formal meeting. The APML and program team attend to address their concerns, if any, with the ILA report and to address how they will resolve or mitigate deficiencies.

Step 14 – Issue the Final Report.
AIR-6.0 or AIR-6.0A - This is usually a replay of the ILA board for AIR-6.0. AIR-6.0 signs the letter with the attached ILA report and forwards it to the PEO. This is AIR-6.0s ILA Certification recommendation to the PEO. The team leader incorporates any changes or corrections resulting from discussions during this AIR-6.0 leadership review.

The final report is forwarded by the team leader to the applicable Program Manager and PEO/SYSCOM Commander. The ILA report is not distributed outside the command until the PEO provides the certification letter in step 15 below.

Step 15 – Issue Logistics Certification.
Upon receipt of the final report, the cognizant PEO/SYSCOM Commander will review the report and certify the ILS certification via a separate letter to the PMA and the MDA and key DoN Stakeholders no later than four weeks prior to the scheduled milestone or FRP decision meetings. For ACAT ID programs, PEOs shall also copy the Deputy Assistant Secretary of Defense (Materiel Readiness) (DASD(MR)) (ref DASN(A&LM) Memo, IPSA Reporting Requirements, dtd 7 Dec 09). with copy to DASN(A&LM) and OPNAV (N4) for Navy / HQMC (I&L) (TLCM) for

USMC, as well as other stakeholders identified in SECNAVINST 4105.1 Series. For joint programs, a courtesy copy of the ILA report should also be provided to other affected Service's PEO and/or Acquisition Executive (ref DASN(A&LM) Memo, IPSA Reporting Requirements, dtd 7 Dec 09).

13.4.D. Process Deliverables

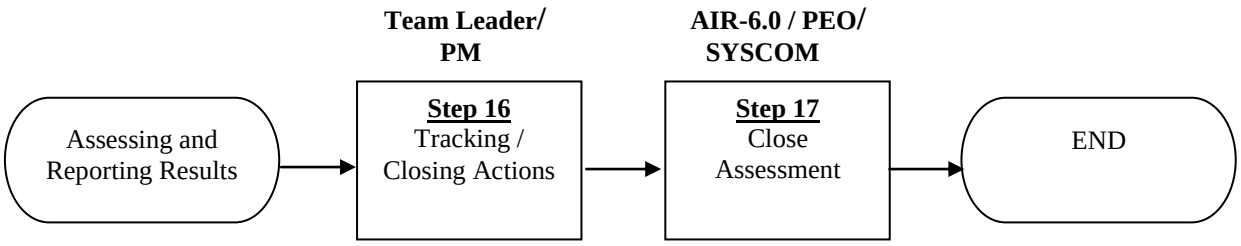
1. ILA Report, including POA&M
2. Logistics Certification Letter

13.5. PART IV - Resolving Deficiencies

13.5.A Objective

The objective of Part IV is to ensure the deficiencies identified in the assessment report are adequately resolved. This is one of the most important tasks in the entire ILA process. If deficiencies in planning, funding, or execution are only documented and not resolved, the end user will not received necessary IPS products. To ensure deficiencies are adequately resolved, the ILA team leader must remain engaged with the Program Office until completion of each deficiency can be independently verified.

13.5.B Process



13.5.C Process Description

Step 16 – Tracking/Closing Actions.
The responsibility for implementing and completing corrective actions remains with the program office, and where applicable, with the external agencies or organizations responsible for logistics support elements not under direct control of the program manager. Written status of the actions in the POA&M must be provided to the ILA Team Leader. The periodicity of these status reports will be as agreed to between the Project Management Office and the team leader. The final responsibility for closing ILA deficiencies remains with the team leader, who should consult with the originator of a deficiency prior to closing it. Corrective Action Status will be reported and assessed at Gate reviews that fall in between ILAs.

Step 17 – Close Assessment.
The ILA team leader must remain engaged with the Program Manager to ensure all POA&M actions are completed. Once all deficiencies have been satisfactorily resolved, as agreed to by the team leader, the ILA may be closed. The team leader provides the program office with correspondence from AIR-6.0 identifying that the program has closed all issues and provides recommendation that the certification can be changed to green. The PEO or SYSCOM commander does not have to re-issue a certification but can status the ILA as closed in future IPS briefs or Gate reviews. This process should be documented in the PEO/SYSCOM implementing procedure.

13.5.D. Process Deliverables

1. Status reports
2. Team Leader responses/guidance to status reports
3. Final IPS Certification (if appropriate)

ILA Deficiency/Recommendation Overview
Overall Program Assessment and Certification Criteria

OVERALL PROGRAM ASSESSMENT AND CERTIFICATION CRITERIA		
NOT CERTIFIED (Red)	**CONDITIONALLY CERTIFIED (Yellow)**	**CERTIFIED (Green)**
A program is not certified when there are major product support planning and implementation issues or actions outstanding that have substantial impact on the program's ability to meet sustainment performance requirements within cost and schedule. Further, there are no plans or work-arounds in place that will correct the deficiency. The program should not proceed to a milestone decision until detailed action plans are developed and in place which meet minimum acceptable sustainment performance requirements with acceptable impacts to cost and schedule. Once these plans are in place and properly resourced to the satisfaction of the ILA team lead, PEO sustainment manager, or next echelon of sustainment competency, the program is considered to be conditionally certified.	A program is conditionally certified when product support planning and implementation issues of moderate risk have detailed action plans established and in place. However, the resolution of the deficiency will not occur prior to the milestone decision and requires continued monitoring. Once the action is completed, there is no expected degradation to sustainment performance requirements and minimal impact to cost and schedule. Once identified actions are resolved as verified by the ILA team lead, PEO sustainment manager, or next echelon of sustainment competency, the program is considered certified.	A program is considered certified when there are no (or only minor) product support planning and implementation issues. Each issue has an approved mitigation plan in place to eliminate the deficiency prior to the milestone decision. There is no impact on the program's ability to meet sustainment performance requirements within cost and schedule.

ILA Risk Matrix

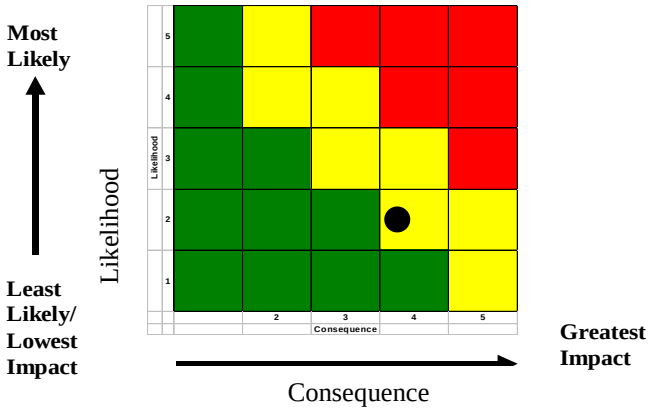


Figure C-3: Risk Matrix

Consequence: Impact on Program If Consequence Occurs

Level	Cost	Schedule	Performance
1	Minor or no impact to supportability	Minor or no impact to supportability	Minor or no impact to supportability
2	Some supportability impact; Re-allocatable within program	Some impact to logistics tasks; Internally adjustable with no milestone changes	Some impact to readiness, but can be remedied by program
3	Funding is not available when needed, moderate impact to supportability	Delays in logistics tasks impacting ability to meet milestones, but workarounds exist such that impact is minimal	Logistics requirements will not be met within budget or schedule, but can be if resources will be applied
4	Funding is not available when needed, significant impact to supportability	Delays in logistics tasks with significant milestone impact	Significant degradation below MOS thresholds
5	Supportability cannot be achieved within current funding profile or not identified	Delays in logistics tasks with major impact to the ability to meet milestones or establish support capability	Logistics performance requirements cannot be met

Figure C-1a. ILA Consequence Decision Table

Likelihood: Probability That a Given Consequence WILL Occur

Level	Likelihood
1	Not Likely
2	Low Likelihood
3	Likely
4	Highly Likely
5	Near Certainty

Figure C-1b. ILA Likelihood Decision Table

CHAPTER XIII: ACQUISITION LOGISTICS SUPPORT

PART B: LOGISTICS REQUIREMENTS FUNDING SUMMARY (LRFS)

13.6. Purpose

13.6.A. The LRFS assists the Product Support Manager/Assistant Program Manager for Logistics (PSM/APML) in maintaining, identifying and understanding all the logistics and funding requirements for a weapons system. If properly formulated, it ties in those requirements (and associated analysis/cost estimates) to specific funding streams in research and development, procurement, and operations funding sources. The LRFS has a symbiotic relationship with the AIR 4-2 Cost Estimating division, other program cost estimating entities, and the program offices financial representatives. It is important to tie in the identification of the requirements, with proper cost estimates, to the proper budget lines.

13.6.B. The LRFS enables the logistician to properly defend the weapons systems budget within the program office and up the chain of command. This will provide the logistician with a well documented program. It will contain the required manning levels and material costs for a program. The logistician will be able to clearly match each requirement to funding, schedule, and document or defend unfunded requirements.

13.6.C. The LRFS assists the PSM/APML in maintaining, identifying and understanding all the logistics & funding requirements for a weapons system. If properly formulated, it ties in those requirements (and associated analysis/cost estimates) to specific funding streams in research and development, procurement, and operations funding sources.

13.6.D. The LRFS is utilized to meet several mandated requirements: the Independent Logistics Assessment (ILA), Life Cycle Sustainment Plan (LCSP), Initial Operational Capability Supportability Review (IOCSR), Full Operational Capability Supportability Review (FOCSR), and numerous other related areas.

13.7. Source Documentation: https://home.navair.navy.mil/air66wiki/

13.8. Discussion. The LRFS tool is available through the above link to the APML Essentials Wiki web page, reference above under Source Documentation. The LRFS should be developed to support each acquisition milestone and maintained as a tool for each acquisition phase.

13.9. POC: Tim Brennan (APEO(L) or John Harris, AIR-6.0T, (301) 757-3085

CHAPTER XIII: ACQUISITION LOGISTICS SUPPORT

PART C: LIFE CYCLE SUSTAINMENT PLAN (LCSP)

13.10. Discussion.

13.10.A. The Life Cycle Sustainment Plan (LCSP) is used to establish, document, and maintain program Acquisition Logistics Support. DoDI 5000.02 update requires that a LCSP be developed for all acquisition programs, and that the LCSP shall be approved as part of the Acquisition Strategy (AS) at Milestones B, C and Full Rate Production Decision Review (FRP DR). Additionally, SECNAVINST 5000.2E requires a logistics support strategy be documented in the AS, which in turn may be further documented in a discretionary logistics supportability plan. According to the Defense Acquisition Guidebook (DAG), the LCSP is required to be developed and included as part of the Acquisition Strategy to document how the sustainment strategy is being implemented.

13.10.B. A sample format was established by the Principal Deputy Under Secretary of Defense Memo of 14 September 2011, "Document Streamlining – Life-Cycle Sustainment Plan (LCSP)"; which is titled: "Life-Cycle Sustainment Plan Sample Outline August 10. 2011 Version 1.0". Some frequently asked questions can be found at the website: https://home.navair.navy.mil/air66wiki/.

13.11. The LCSP shall be a part of the program's Acquisition Strategy and integrated with other key program planning documents. The LCSP shall be updated and executed during Production and Deployment and Operations and Support. Life-cycle sustainment planning shall be considered during Materiel Solution Analysis, and shall mature throughout Technology Development.

(a) An LCSP shall be prepared for Milestone B, and updated for Milestone C, FRP and Initial Operational Capability (IOC). The planning shall be flexible and performance-oriented, reflect an evolutionary approach, and accommodate modifications, upgrades, and reprocurement.

(b) Life-cycle sustainment considerations include supply; maintenance; maintenance planning and design interface; packaging and transportation; sustaining engineering; data management; configuration management; support equipment; automatic identification technology, radio-frequency identification, and iterative technology refreshment; Human System Integration (HSI) (including training and manpower); environment (including hazardous materials); safety (including explosives safety), and occupational health; protection of critical program information and anti-tamper provisions; supportability; and interoperability; and disposal. The LCSP should contain metrics in order to gauge whether sustainment metrics are achieved and sustained throughout the life cycle.

13.12. POC: Ildegardo Olea, AIR 6.6 TD; 301-757-6378.

Additional information can be found on the APML Essentials web site at: https://home.navair.navy.mil/air66wiki/.

CHAPTER XIII: ACQUISITION LOGISTICS SUPPORT

PART D: DOD HANDBOOK: PRODUCT SUPPORT ANALYSIS (PSA)

13.13. Purpose. MIL-HDBK-502A Product Support Analysis (PSA) offers guidance on product support as an integral part of the systems engineering process. This handbook provides guidance for the framework and descriptions governing performance of Product Support Analysis (PSA) during the life cycle of systems and equipment. To provide more affordable product support for materiel systems the DoD is focusing on total ownership cost throughout the life cycle. Achieving affordable support takes effective product support management across the product's life cycle.

13.14. Source Documents:
Defense Acquisition Guidebook
MIL-HDBK-502A Product Support Analysis
TA-STD-0017, Product Support Analysis
GEIA-STD-0007, Logistics Product Data
GEIA-HB-0007, Logistics Product Data Handbook
DI-SESS-81758, Logistics Product Data
DI-SESS-81759, Logistics Product Data Summaries
NAVAIR Contracting for Supportability Guide

13.15. Discussion

13.15. A. This handbook addresses the overall PSA process and its associated activities, the selection and tailoring of those activities to meet DoD program supportability objectives, and sample contract language for acquiring PSA deliverables. The handbook offers guidance on TA-STD-0017, PSA activities as an integral part of the overall systems engineering process. The information contained herein is applicable, in part or in whole, to all types of materiel and automated information systems and all acquisition strategies. The focus of this handbook is to provide guidance to the members of the defense acquisition workforce who are responsible for the supportability of materiel systems or automated information systems. This handbook is for guidance only and cannot be cited as a requirement.

PSA is a wide range of analyses that are conducted within the systems engineering process. The goals of Product Support Analyses are to ensure that supportability is included as a system performance requirement and to ensure the system is concurrently developed or acquired with the optimal support system and infrastructure. PSA includes the integration of various analytical techniques with the objective of designing and developing an effective and efficient Product Support Package. The primary techniques used in PSA are: Failure Mode, Effects and Criticality Analysis (FMECA), Fault Tree Analysis (FTA), Reliability Centered Maintenance (RCM) Analysis, Level of Repair Analysis (LORA), Maintenance Task Analysis (MTA), and core logistics analysis, source of repair analysis, and depot source of repair analysis.

13.15. B. The PSA 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-HDBK-502A and compliments TA-STD-0017 which provides general requirements and activity performance in conducting PSA 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
- PSA 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
- The PSA Process flow for all acquisition phases
- Samples of CDRLS and DIDS
- Assessment of Program’s Intellectual Property Rights and Developing Data Rights Strategy

13.15. C. The PSA normally encompass the following activities identified below:

Activity 1: Product Support Strategy
Develop a proposed PSA program strategy for use early in an acquisition program, and identify the Product Support Analysis activities and sub-activities which provide the best return on investment.

Activity 2: Product Support Planning
Develop a Product Support Analysis Plan which identifies and integrates all Product Support Analysis activities, identifies management responsibilities and activities, and outlines the approach toward accomplishing analysis activities.

Activity 3: Program and Design Reviews
Establish a requirement for the contractor to plan and provide for official review and control of released design information with Product Support Analysis program participation in a timely and controlled manner and to assure that the Product Support Analysis program is proceeding in accordance with the contractual milestones so that the supportability and supportability related design requirements will be achieved.

Activity 4: Application Assessment
Identify and document the supportability factors related to the application of the new product.

Activity 5: Support System Standardization
Define supportability and supportability related design constraints for the new product based on existing and planned product support resources which have benefits due to cost, manpower, personnel, readiness, or support policy considerations, and provide input into mission hardware and software standardization efforts.

Activity 6: Comparative Analysis
Select or develop a Baseline Comparison System (BCS) representing characteristics of the new product for (1) projecting supportability related parameters, making judgments concerning the feasibility of the new product supportability parameters, and identifying targets for improvement, and (2) determining the supportability, cost, and readiness drivers of the new product.

Activity 7: Technological Opportunities
Identify and evaluate design opportunities for improvement of supportability characteristics and requirements in the new product.

Activity 8: Supportability and Supportability Related Design Factors
Establish quantitative operations and support characteristics of alternative design and operational concepts, along with support-related design objectives, goals and thresholds, and constraints for inclusion in requirement, decision, and program documents and specifications.

Activity 9: Functional Requirements
Identify the operations, maintenance, and support functions that shall be performed in the intended environment for each product alternative under consideration; identify the human performance requirements for operations, maintenance and support; document the requirements in a task inventory. In addition to the specific task activities identified below, consider accomplishing: Equipment Downtime Analysis, Maintainability Design Evaluation, Failure Modes and Effects Analysis (FMEA), Testability Analysis, and Human Factors Analysis.

Activity 10: Support System Alternatives
Establish viable support system alternatives for the new product for evaluation and tradeoff Analysis

Activity 11: Evaluation of Alternatives and Tradeoff Analysis
Determine the preferred support system alternative(s) for each product alternative and participate in the assessment of alternative product tradeoffs to determine the best approach (support, design, and operation) which satisfies the need with the best balance between cost, schedule, performance, readiness, and supportability.

Activity 12: Task Analysis
Analyze required operations and maintenance tasks for the new product to:

a. Identify product support resource requirements for each task.
b. Identify new or critical product support resource requirements.
c. Identify Packaging, Handling, Storage, and Transportation (PHS&T) requirements.
d. Identify support requirements which exceed established goals, thresholds, or constraints.
e. Provide data to support participation in the development of design alternatives to reduce O&S costs, optimize product support resource requirements, or enhance readiness.
f. Provide detail data for preparation of cost estimates related to technical manuals, training programs, manpower, and personnel lists.

Activity 13: Early Distribution Analysis
Assess the impact of the introduction of the new product(s) on an existing product(s), identify sources of manpower and personnel to meet the requirements of the new product, determine the impact of a failure to obtain the necessary support resources for the new product, and determine essential support resource requirements for use in the intended environment.

Activity 14: Diminishing Manufacturing Sources and Material Shortages Management
Establish a program for the analysis of the loss or impending loss of manufacturers or suppliers of parts and material required to operate and sustain the product.

Activity 15: Field Feedback
Analyze the supportability and supportability related field feedback data to verify achievement of the established objectives/thresholds.

Activity 16: Disposal Analysis
Identify the disposal procedures associated with a product, including facility equipment, focusing on those components, assemblies, sub-assemblies, parts, and materials that contain hazardous materials, wastes, pollutants, or precious metals, or are under export controls. Additionally, identify those products that can be recycled, reused, or salvaged.

Activity 17: Operational Suitability Test, Evaluation, Verification and Validation
Assess the achievement of specified requirements and identify reasons for deviations and methods of correcting deficiencies and enhancing product readiness.

These activities support life cycle sustainment product support and integrate the twelve Integrated Product Support (IPS) Elements. These elements include:

• Maintenance Planning and Management. Process defines the repairs and upkeep tasks, schedule, and resources required to care for and sustain a weapons system with the focus on being able to define the actions and support necessary to attain the system's operational availability. These processes seek to identify, plan, resource, and implement maintenance concepts and requirements early in the weapon system acquisition to influence design for supportability and to enable properly planned maintenance at the right time, right level, and right location while optimizing resources.

• 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. Procurement of data, consumables, repair parts, and spares, to establish and to be able to perform Organizational ("O"), Intermediate("I"), and Depot ("D") level maintenance. Provisioning data is provided to the Program Office and NAVSUP WSS. NAVSUP WSS coordinates with FLIS and ERP 1.1 for NSN assignment that insure data is available to NAVSUP WSS, NAVAIR (via ERP1.1), and DLA to perform procurements. Data provided to the program office such as the Illustrated Parts Breakdown (IPB) becomes part of the technical publications that allow parts to be ordered in support of maintenance. The Indentured Bill Of Material (IBOM) is necessary to be able to perform DMSMS/Obsolences management and assist in development of Repair BOMs for "I" level and "D" level maintenance stand up. Data must be maintained / updated to reflect configuration changes. These items are necessary to field and support the system including consumables, repair parts, and spares.

• Support Equipment. Individual Material Readiness List (IMRL) and non-IMRL equipment required to make an aeronautical system, command and control system, support system, subsystem, or end item of equipment (SE for SE) operational in its intended environment. This includes all equipment required to launch, arrest (except Navy shipboard and shore based launching and arresting equipment), guide, control, direct, inspect, test, adjust, calibrate, gauge, measure, assemble, disassemble, handle, transport, safeguard, store, actuate, service, repair, overhaul, maintain, or operate the system, subsystem, end item, or component. Support Equipment requires supporting elements of logistics be procured as part of its support package (i.e. ILS for support equipment).

• 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. The resources, processes, procedures, design considerations and methods to protect systems, subsystems, components and parts against environmentally induced corrosion and deterioration, shock and vibration, electrical field forces and other forms of degradation during worldwide shipment, handling, and storage conditions. This includes protection from the effects of direct exposure to extremes of: climate, terrain, operational environments, commercial distribution system and the Defense Transportation System. Transportability compatibility includes all modes of transportation, handling equipment and warehousing.

• 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.

• Sustaining Engineering. Focuses on improving engineering and logistics activities from the beginning of the life cycle to disposal in order to improve the maintainability, reliability, availability and supportability of the system. This includes the following: the collection and triage of all service use and maintenance data; analysis of safety hazards, failure causes and effects, reliability and maintainability trends, and operational usage profiles changes; root cause analysis of in-service problems (including operational hazards, deficiency reports, parts obsolescence, corrosion effects, and reliability degradation); the development of required design changes to resolve operational issues; and other activities necessary to ensure cost-effective support to achieve peacetime and wartime readiness and performance requirements over a system's life-cycle.

• Product Support Management

13.16. Responsibilities

13.16. 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.

13.16. B. The APML shall conduct Product Support Analysis 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 Life Cycle Sustainment Plan (LCSP). 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.

13.16. C. The APML, in coordination with Military Service logistics commands, shall develop a life-cycle product (i.e., LCSP). The plan shall include actions to assure sustainment, and continually improve product affordability for programs in initial procurement, reprocurement, 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.
1
• 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 reprocurement actions.

13.17. For a copy of the PSA follow the link to Logistics Tools, then PSA on the following website:
https://dap.dau.mil/career/log/blogs/archive/2013/03/25/new-mil-hdbk-502a-department-of-defense-handbook-product-support-analysis.aspx
Also for additional related information refer to the "NAVAIR Logistics Handbook" located on the AIR-6.6 APML Essentials Page https://home.navair.navy.mil/air66wiki/MainPage.ashx

13.18. POC: Dr. Teresa Fazio, AIR 6.6E, (301) 342-1078

CHAPTER XIII: ACQUISITION LOGISTICS SUPPORT

PART E: LOGISTICS PRODUCT DATA (LPD)

13.19. Purpose. MIL-HBDK-502A, Product Support Analysis (PSA), provides guidance on support system development as an integral part of the systems engineering process. GEIA-STD-0007, Logistics Product Data (LPD) identifies a method for compiling the support and support related engineering and logistics data from equipment manufacturers into a comprehensive database to support resource identification, development and provisioning. This chapter will identify the logistics tasks that must be or should be accomplished phase by phase during the systems acquisition process. Information will also be provided for accessing Standard Work Packages (SWPs) for product development.

13.20. Source Documents.

GEIA-STD-0007, Logistics Product Data
GEIA-HB-0007, Logistics Product Data Handbook
DI-SESS-81758, Logistics Product Data
DI-SESS-81759, Logistics Product Data Summaries
MIL-HDBK-502A DoD Handbook Product Support Analysis
NAVAIR Instruction 4790.22B, Design Interface and Maintenance Planning Program

13.21. Discussion.

13.21.A. LPD identification is part of a larger process previously known as the Logistics Support Analysis (LSA) process. That process was actually two separate military standards MIL-STD-1388-1A, Logistics Support Analysis and MIL-STD-1388-2B, Logistics Support Analysis Record (LSAR). These standards were cancelled as part of the Acquisition Reform initiative in 1997. They are worthy of mentioning here because many equipment manufacturers continued to use these standards, followed many of the tasks requirements and used software programs to develop the LSAR to produce output summaries to satisfy government needs. Over the years LSA knowledge has waned in both government and industry. However, the LSAR continues to be a valuable tool and the data content now follows the guidance of GEIA-STD-0007. The data elements or attributes are very similar to MIL-STD-1388-2B although data transfer has been enhanced with the use of Extensible Markup Language (XML). In present day vernacular, the LSA process has taken on a new title, Supportability Analysis. There is some misunderstanding of the scope of the term Supportability Analysis but that is being further defined by OUSD Material Readiness with guidance and policy forthcoming in FY13. The requirement to develop the LPD database is contained in NAVAIR Instruction 4790.22B. That instruction also requires several standard output summaries, e.g., Maintenance Plan, Provisioning Record and Support Equipment Recommendation Data. The LPD database is required for all new systems acquisitions and for all approved Class I Engineering Change Proposals (ECPs). The Supportability Analysis tasks and the development of the LPD database represents a fundamental change in the way data requirements are levied on contracts, but it does not contain any "how tos" regarding task accomplishment. The tasks are 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 throughout the system engineering process. The general flow of DI/MP tasks prior to Milestone B are identified in Figure 13-1.

13.21.B. The Supportability Analysis tasks and LPD database development must be tailored to the unique requirements for each program. Tailoring is not difficult, however, program logistics managers may not be familiar with the process. Assistance is available from AIR-6.7.1 representatives. Through tailoring, contractors are strongly encouraged to offer support to the program office and should be required to rely upon engineering data to satisfy the Government and cost-effectively meet DoD's needs. Several options are available for LPD database development and delivery of summary reports. Option selection is accomplished early in the system development process and is integral with tailoring.

13.22. Responsibilities. The Assistant Program Manager Logistics (APML) should determine what acquisition logistics products are to be developed and how they will be delivered (on-line access, electronic delivery to a government IDE, full-file data transfer, 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 Product Data Element Managers, cognizant IPT members and others to determine what data elements or attributes are needed to populate the LPD database. The data elements or attributes will be used for developing the output summaries. This logistics planning data will also be included in the Life-Cycle Sustainment Plan (LCSP) or a separate Product Support Analysis Plan (PSAP).

13.23. Content.

13.23.A. Initial delivery and subsequent updates to the LPD can be delivered digitally using DI-SESS-81758, Logistics Product Data. If the option for output summary delivery is selected, DI-SESS-81759, Logistics Product Data Summaries is used.

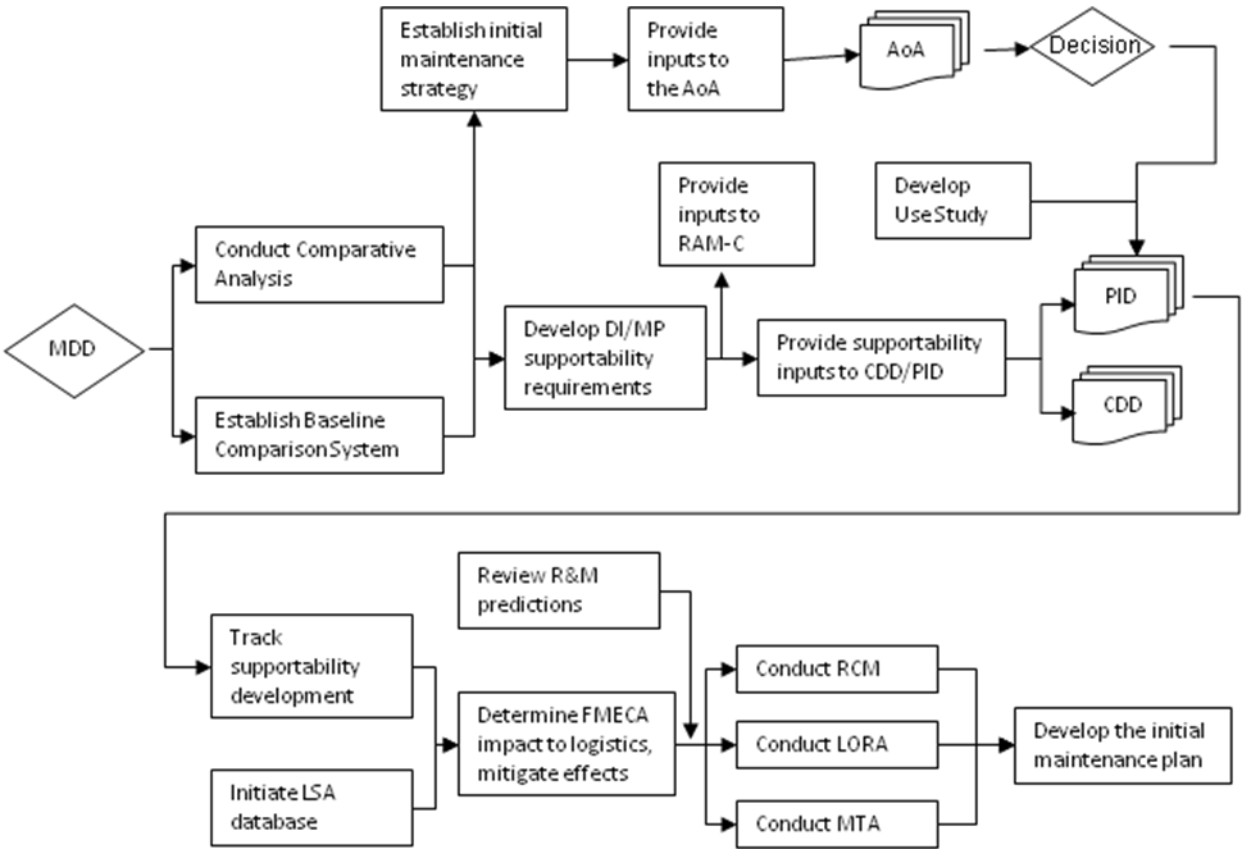


Figure 13-1 DI/MP Tasks

13.23.B. Additional guidance on output summary data element or attribute requirements can be found in GEIA-HB-0007, Logistics Product Data Handbook, Appendix D. Access to the 6.7.1 SWPs can be gained through the following hyperlink: **https://home.navair.navy.mil/air66wiki**.

13.24 POC: Jackie Heiner, 6.7.1.1 Design Interface Branch Manage, (301) 866-2492 or Michael Holder, Maintenance Planning Branch Manager, (301) 866-4432

CHAPTER XIII: ACQUISITION LOGISTICS SUPPORT

PART F: INITIAL OPERATIONAL CAPABILITY SUPPORTABILITY REVIEW (IOCSR)

13.25. Purpose

13.25.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.

13.25.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.

13.25.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.

13.26. Source Document: NAVAIRINST 4081.3

13.27. Responsibility

13.27.A. Phase I – Identification of Programs to be Assessed. AIR-60T utilizes the AIR-1.0 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 calendar year (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.

13.27.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 program will ensure an accurate assessment is available at least one month prior to the IOCSR Pre-Board or Flag Board meetings.

13.27.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

13.27.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/U&W/JSF), NAVICP, NAVSUP, and COMNAVRESFOR.

13.27.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.

13.27.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.

13.27.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/U&W/JSF), NAVICP, NAVSUP, CNATRA, and COMNAVRESFOR.

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

13.27.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.

13.28. POC: John Harris, AIR-6.0T, (301) 301-757-3085

CHAPTER XIII: ACQUISITION LOGISTICS SUPPORT

PART G: WARRANTIES

13.29. Purpose. To describe the warranty development process.

13.30. Discussion

13.30.A. The Defense Acquisition Guidebook contains the following paragraph (2.3.10.2.7) 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. Warranty program data should be included in the Life-cycle Sustainment Plan.

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

13.30.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.

13.30.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).

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

- Task the Procurement Contracting Officer (PCO) to develop contractual language to implement the warranty.

- Task the APML/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.

13.31. POC: AIR 2.0 , Contracts

CHAPTER XIV: ENGINEERING DISCIPLINES

PART A: HUMAN SYSTEMS INTEGRATION PROCESS

14.1. Purpose. Navy personnel are an integral part of the total system, and as such, human performance and design requirements must be addressed concurrently with other system performance requirements. The quality of the design and support solutions, associated with the system acquisition, directly impacts warfighter effectiveness and total system (hardware, software, human) performance. Nearly 70% of the Navy's budget is spent on personnel related expenses; most of these personnel costs are driven by decisions made during the early phases of the system acquisition process, and shortcuts taken in the design phase can easily become sustainment and operational problems. The assimilation of human performance considerations into the systems engineering and acquisition process is known as Human Systems Integration (HSI) and influences system design and associated support requirements so that developmental, non-developmental, and product-improved systems can be operated and maintained at the highest performance, and in the most cost-effective and safe manner.

14.2. Source Documents:

DoDI 5000.02, Operation of the Defense Acquisition System, Enclosure 8 Human Systems Integration

SECNAVINST 5000.2E, Implementation and Operation of the Defense Acquisition Systems and the Joint Capabilities Integration and Development System, Chapter 6

Defense Acquisition Guidebook, Chapter 6, HSI

14.3. Discussion

In accordance with current DoD policy (DoDI 5000.02, dated December 8, 2008), the Program Manager (PM) shall have a plan for HSI in place early in the acquisition process to optimize total system performance, minimize total ownership costs, and ensure that the system is built to accommodate the characteristics of the user population that will operate, maintain, and support the system. HSI planning shall be summarized in the Acquisition Strategy and SEP and shall address the following disciplines: human factors engineering, personnel, habitability, manpower, training, safety and occupational health, and personnel survivability. Navy policy also reflects its commitment to HSI SECNAVINST 5000.2E, dated 1 September 2011, requires PMs to apply HSI as part of a systems engineering approach. This ensures that existing systems engineering processes and reviews will address the requirements on the human to operate, maintain, and support the resultant design. Analyses to reduce manpower, improve human performance, improve system reliability and usability, and minimize personnel risk are included as part of the HSI process.

The total system includes not only the prime mission equipment, but also the people who operate, maintain, and support the system; the training and training devices; and the operational and support infrastructure. The key to a successful HSI strategy is integration. To optimize total system performance and determine the most effective, efficient, and affordable design entails trade studies both within the HSI disciplines (manpower, personnel, training, safety and occupational health, human factors, survivability, and habitability) and between the HSI disciplines and traditional systems engineering (hardware and software) and acquisition disciplines. Program support (technical personnel, processes, tools) for these disciplines is provided by various NAVAIR engineering and logistics competencies. Beginning at program inception, the HSI effort helps develop system-specific and measurable HSI requirements associated with the disciplines. HSI disciplines are then actively employed throughout the acquisition process to ensure a product is designed and delivered that is operable and supportable within those constraints. Further guidance and HSI process documentation is available from the NAVAIR HSI POCs.

14.4. Why HSI?

Navy systems employed by the fleet today make demands on the readiness, performance effectiveness, and mental and physical capabilities of personnel operating, maintaining, and supporting them. The systems being designed and acquired for tomorrow have the potential to increase these demands on operators and maintainers as system and environmental complexity increases. To address these concerns, HSI integrates the various disciplines of systems engineering and logistics that address the roles, requirements, provisions, and accommodations for human capabilities and limitations in system developments.

14.5. HSI Information and Lessons Learned

A number of programs in the last several years have made significant strides in implementing HSI within the systems engineering and acquisition processes. Experiences from these programs have provided a number of lessons learned. The following list provides some of these lessons and provides guidance on sources that can assist HSI practitioners in avoiding some of the pitfalls.

a) HSI Planning. As stated in DoDI 5000.02, dated December 8, 2008, HSI planning shall be summarized in the Acquisition Strategy and SEP. The Virtual SYSCOM HSI Plan Preparation Guide can assist HSI teams in the preparation, update, and evaluation of HSI planning. The Virtual SYSCOM HSI Plan Preparation Guide and a Data Item Description for the HSI planning process can be obtained from the NAVAIR HSI POCs.

b) Plan Analysis. Continual analysis of system functionality provides data to help determine the best allocation of functions to personnel, hardware, or software. Results guide human workload predictions, man-machine interface requirements, and procedural, software, and hardware innovations needed to ensure that the human element can fulfill and enhance total system performance.

c) Conduct Proactive Tradeoffs. Tradeoff analysis between design, operational, and support alternatives are an inherent part of system development. In conducting tradeoff analyses both within HSI domains and for the system, the primary HSI goal is to maximize human performance to optimize performance and support capabilities for the total system within cost schedule and performance constraints.

d) Team Effort. DoD acquisition policy stresses the importance of integrated product and process development (IPPD). IPPD is a management technique that integrates all acquisition activities starting with capabilities definition through systems engineering, production, fielding/deployment and operational support in order to optimize the design, manufacturing, business, and supportability processes. At the core of the IPPD are Integrated Product Teams (IPTs). HSI support to Program or IPT level working groups are important integration mechanisms to be considered. Stove-piping IPTs should be avoided.

e) HSI Assessments. The NAVAIR Systems Engineering Technical Review (SETR) process shall be used to assist acquisition and competency personnel in evaluating the application of HSI principles during the acquisition life cycle. The NAVAIR SETR incorporates criteria related to HSI implementation into the review on a par with other design and support criteria for a given acquisition program.

f) Human Systems Information Guides. The Virtual SYSCOM HSI Working Group has developed HSI Guides that complement the DoD and DON acquisition policy. These guides are divided into multiple volumes that address all potential phases of a program from initiation of Concept, through Design and Development, to completion of Operations and Support. In these volumes, PMs, designers and HSI elements specialist will find what they need to do to successfully implement HSI at any stage of their program. Copies of these guides can be obtained from the NAVAIR HSI POCs.

g) Competency Support. The disciplines of HSI are scientifically-based technical disciplines with supporting theories, empirical data, analytical techniques, methodologies, and professional guidelines. Although fleet user representation on design teams is desirable and necessary, HSI professionals are able to provide their expertise for the technical bases upon which to support decision making in tradeoff analyses.

14.6. POCs: Mr. John Meyers (301-342-9201).

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 4355.19D, Systems Engineering Technical Review Process (17 APR 09)
EIA Standard 632, Systems Engineering, 7 Jan 1999
DoDI 5000.02 of 03 Dec 08
SECNAVINST 5000.2E of 1 Sep 11
Defense Acquisition Guidebook of 8 Oct 04
NAVAIRINST 5000.21B of 24 Jan 08
DoD Systems Engineering Plan Preparation Guide, Version 2.01 of Apr 08
Naval Systems Engineering Guide, Oct 04
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
Naval Systems Engineering Resource Center (NSERC) https://nserc.navy.mil/

14.9. Definitions

System - A system is one or more end products and sets of related enabling products that allow end products, over their life cycle of use, to meet stakeholder needs and expectations.

Systems Engineering - An interdisciplinary approach encompassing the entire technical effort to evolve and verify an integrated and life cycle balanced set of system people, product, and process solutions that satisfy customer needs. Systems engineering encompasses:

a. the technical efforts related to the development, manufacturing, verification, deployment, operations, support, disposal of, and user training for, systems products and processes;
b. the definition and management of the system configuration;
c. the translation of the system definition into work breakdown structures; and
d. development of information for management decision making.

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 engineering efforts using Systems 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.

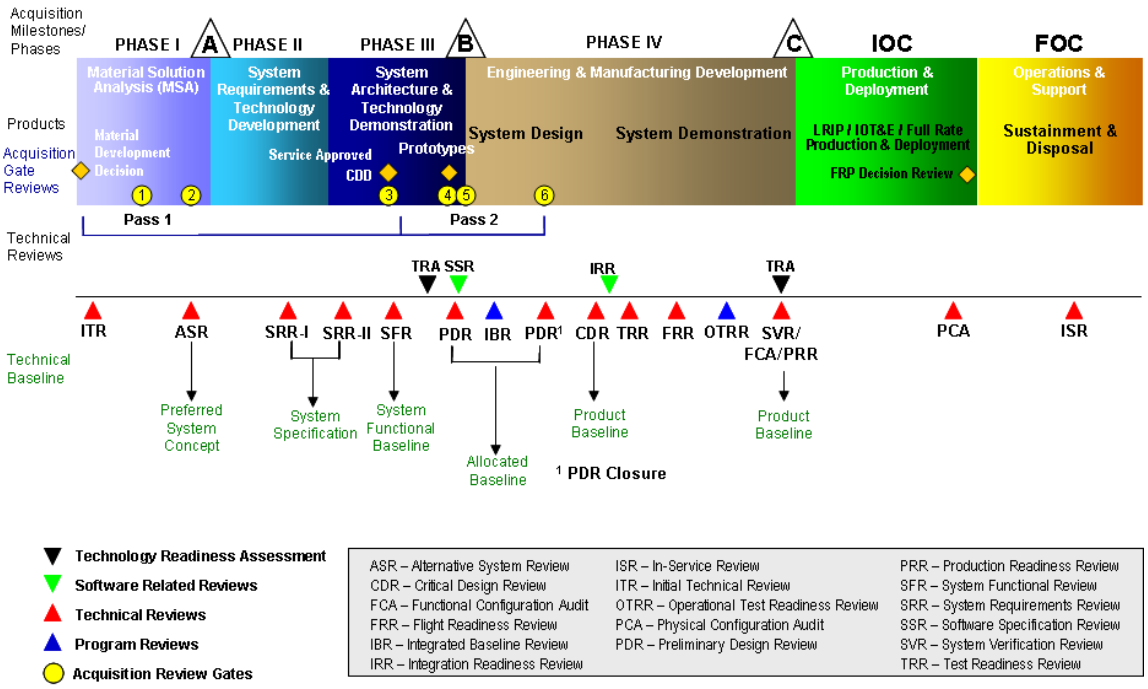


Diagram of the Typical Systems Engineering Technical Reviews

14.10.B. NAVAIRINST 4355.19D establishes the policy, outlines the process, and assigns responsibilities for the conduct of the different Systems Engineering Technical Reviews (SETRs) on NAVAIR programs. It also provides guidance on the Systems Engineering Plan (SEP) that is required by DoDI 5000.02 of 02 Dec 08 (see https://acc.dau.mil/CommunityBrowser.aspx?id=17799 for detailed guidance). The SEP 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 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://nserc.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. POCs: Jennifer Young, APEO Engineering, AIR-1.0 Programs, (301) 757-4463

CHAPTER XIV: ENGINEERING DISCIPLINES
PART C: INTEGRATED BASELINE REVIEWS

14.12. Purpose. The purpose of the Integrated Baseline Review (IBR) is to achieve an understanding of the of the Performance Management Baseline (PMB) and its relationship to the underlying Earned Value Management Systems (EVMS) and processes that will operate during the contract execution, and assess risk areas associated with the remaining effort, as well as develop confidence in the program's operating plans.

14.13. Source Documents: Defense Acquisition Guidebook (specifically section paragraphs 11.3.1.3, 4.3.2.4.2, and 4.3.3.4.1), SECNAVINST 5000.E (Paragraphs 1.5.4.6, 1.11.4.3.1.2 and Annex 1-A), and NAVAIRINST 4355.19C (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 Federal Acquisition Regulation (FAR) clause used in the solicitation and/or contract). The process should be employed throughout the life of the project to maintain continuing PM's understanding. This review is required for contracts requiring compliance with the EVMS Guidelines. (ANSI-748-current version). Also, the IBR is an AIR-4.2 Best Practice and has been identified by the NAVAIR Commander as mandatory.

The objectives of the IBR Process 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

The IBR Process consists of five events: 1) Joint Government/Prime Management Systems Training, 2) Prime Management Systems Assessment 3) Subcontractor IBRs, 4) Schedule Risk Assessment (SRA) and 5) Total Contract IBR. These events are described below:

1) Joint Management Systems Training. Prior to the end of the first full accounting period after contract award, the contractor hosts and facilitates a joint Government/Prime training session on the contractor's management control systems. The purpose of this training is to set management expectations early and get a solid plan prior to technical immersion. This training is usually conducted in conjunction with the Post Award Conference, however, this training may not be applicable for IBR teams familiar with the contractors internal processes based on previous program experience.
2) Prime Management Systems Assessment. Conducted within 60 - 90 calendar days after contract award. The primary goal is early identification of management risk areas, so they can be corrected prior to the Total Contract IBR. The contractor demonstrates that, adequate management processes are being employed, adequate resources assigned, and effective EV methods are being used to accurately status contract cost, schedule, and technical performance.
3) Subcontractor IBRs. IBRs are conducted on subcontractors that report EVM data. The subcontractor IBR(s) are led by the Prime contractor with Government participation. All subcontractor IBRs should be conducted within 90 days of Subcontract Authority to Proceed.
4) Schedule Risk Assessment (SRA). The SRA shall be completed prior to the end of the fifth full month accounting period 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, Near Critical Paths, and Driving 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.

5) Total Contract IBR. Conducted no later than 180 calendar days after contract award. The Government will assess the contractor's PMB, including all awarded subcontracted effort, to be used for performance measurement to ensure complete coverage of the statement of work, logical scheduling of work activities, adequate resourcing, and identification of inherent risks.

   Subsequent baseline reviews may be performed when any of the following occur: a) a significant contract option is exercised, b) incorporation of major modifications, c) incorporation of an Over Target Budget/Over Target Schedule, d) review of subsequent detail planning windows (often referred to as Rolling Wave or Block Planning) unavailable at the previous IBR event, e) in support of EAC site visits, or f) per government program manager discretion.

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. 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.D. Upon completion, the results of the IBR need to be 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.E. 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: Reginald Goodman, AIR-4.2.3, (301) 342-2455

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, quality assurance/engineering, manufacturing readiness level and assessments (MRL/MRA), supply chain management (SCM), and critical safety item and critical item management (CSI/CIM).

14.18. Discussion

14.18.A. AIR-4.1.9 personnel provide ME and quality assurance 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, DoD 4245.7-M, NAVSO P-6071, 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 5000.2E. NAVAIRINST 4355.19D (subj: Systems Engineering Technical Review Process; dated 17 April 2009) 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.

14.18.B. AIR-4.1.9 support is enlisted for all program phases, well before contract award, in order to influence acquisition planning and to ensure that manufacturing, producibility, production scheduling, 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 all aspects of manufacturing capability, capacity, and readiness; 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 actively work to identify, assess, and mitigate manufacturing and quality risks beginning early in development and continuing through production. This role is accomplished by participating in design reviews, schedule risk assessments, and program meetings; by reviewing contractor quality, producibility, and manufacturing plans, reports, and internal documents; by reviewing 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, lean/agile systems, SCM, and manufacturing readiness assessment throughout the acquisition life cycle.

- Quality, including the development and implementation of the quality system, process control, variability reduction, foreign material exclusion, workmanship, and nonconformance prevention.

- CIM (Critical Item Management), including the development and implementation of processes, guidance, handbooks, and instructions related to Critical Application Items and Critical Safety items, with the goal of mitigating the risk that a non-conforming critical part will be installed on an aircraft or other aviation equipment and fail in service with adverse affects on safety and/or operational effectiveness.

- SCM (Supply Chain Management), including the development and implementation of processes enabling enhanced visibility into manufacturing & quality controls from the prime contractor

through lower tier suppliers in the acquisition of Naval Aviation aircraft and weapon systems, and coordination with other parties involved in other aspects related to acquisition Supply Chain Management, to mitigate programmatic production technical and schedule risk. Encompassed within this is involvement in acquisition related DoD-wide anti-counterfeit-component developments.

- Anti-counterfeit effort, including assisting programs in development and implementation of a counterfeit prevention program to detect, track, and report suspect counterfeit material, to mitigate the risk of counterfeit material getting into the DoD supply chain.

14.19. POC: Allen Heim, AIR-4.1.9, (301) 995-2965

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 4355.19D, Systems Engineering Technical Review Process, 17 Apr 09
Naval Systems Engineering Resource Center (SERC) -- https://nserc.navy.mil/
SETR Risk Assessment Checklists (available via SERC website)
NAVAIRINST 13034.1D, Flight Clearance Policy for Air Vehicles and Aircraft Systems, 15 March 10
Naval Systems Engineering Guide, Oct 04

Tools are available to assist in the development and management of requirements (e.g., Data Object Oriented Repository System (DOORS)) and additional SE tools via the NAVAIR Systems Engineering Resource Center website at https://nserc.navy.mil/.
NAVAIR AIR-4.0P Airworthiness Website -- https://airworthiness.navair.navy.mil/
Defense Acquisition University (DAU) -- http://www.dau.mil/

14.22. Discussion

14.22.A. NAVAIRINST 4355.19D 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 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:

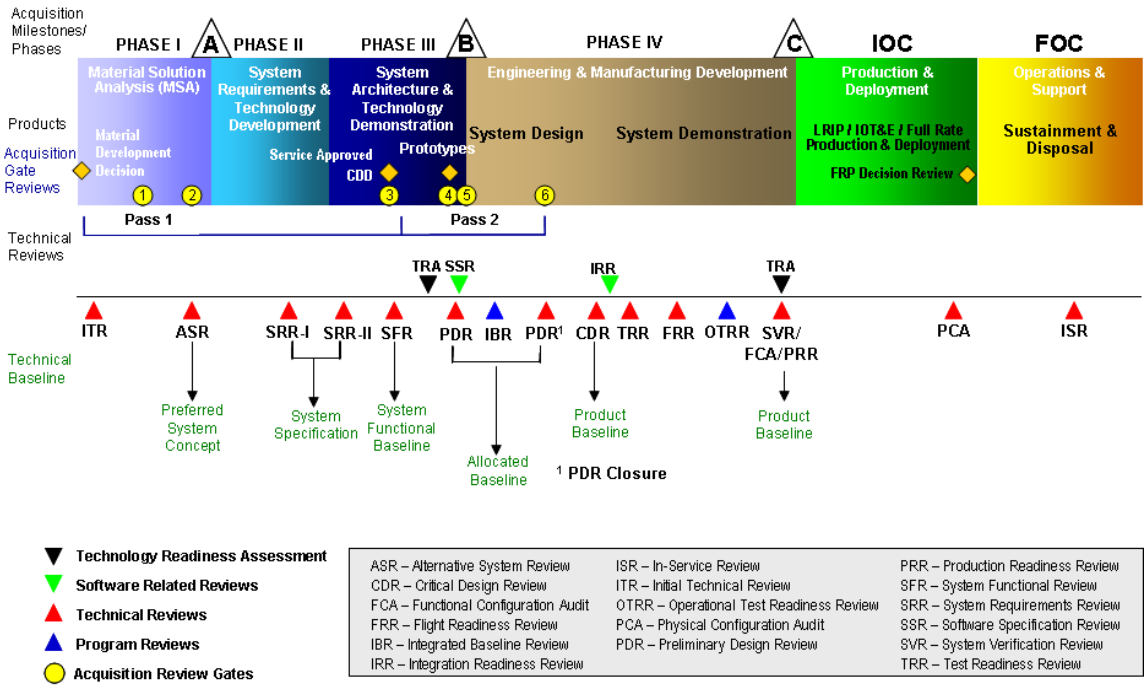
a) the SEP -- see the SERC website or https://acc.dau.mil/CommunityBrowser.aspx?id=17799 for detailed guidance;

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 4355.19D 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 SERC website at https://nserc.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 technical assessment. The review may be tailored in accordance with the technical scope and risk of the system. For any review that is tailored out of the program, the APMSE needs to ensure that the elements of the deleted review are not skipped, but are progressing as necessary to ensure readiness for the following reviews and fielding. Details of tailoring should be described in the SEP should occur as part of the APMSE or systems engineer coordination of the review elements with the AIR-4.1 cognizant authority (APEO(E))

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.

14.23. POCs: Jennifer Young, APEO Engineering, AIR-1.0 Programs, (301) 757-4463

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.

14.25. 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:

NAVAIRINST 5000.21B, Program/Project Risk Management, of 24 Jan 08
DoD Directive 5000.01 of 12 May 03
DoD Instruction 5000.02 of 03 Dec 08
Risk Management Guide for DoD Acquisition (Sixth Edition/Version 1.0 of August, 2006)
NAVAIR Risk Management Handbook
DSMC Risk Management Guide for DoD Acquisition
Multiple commercial and DoD publications are available
NAVAIRINST 4355.19D, Systems Engineering Technical Review Process, 17 Apr 09
SETR Risk Assessment Checklists

14.27. Discussion

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

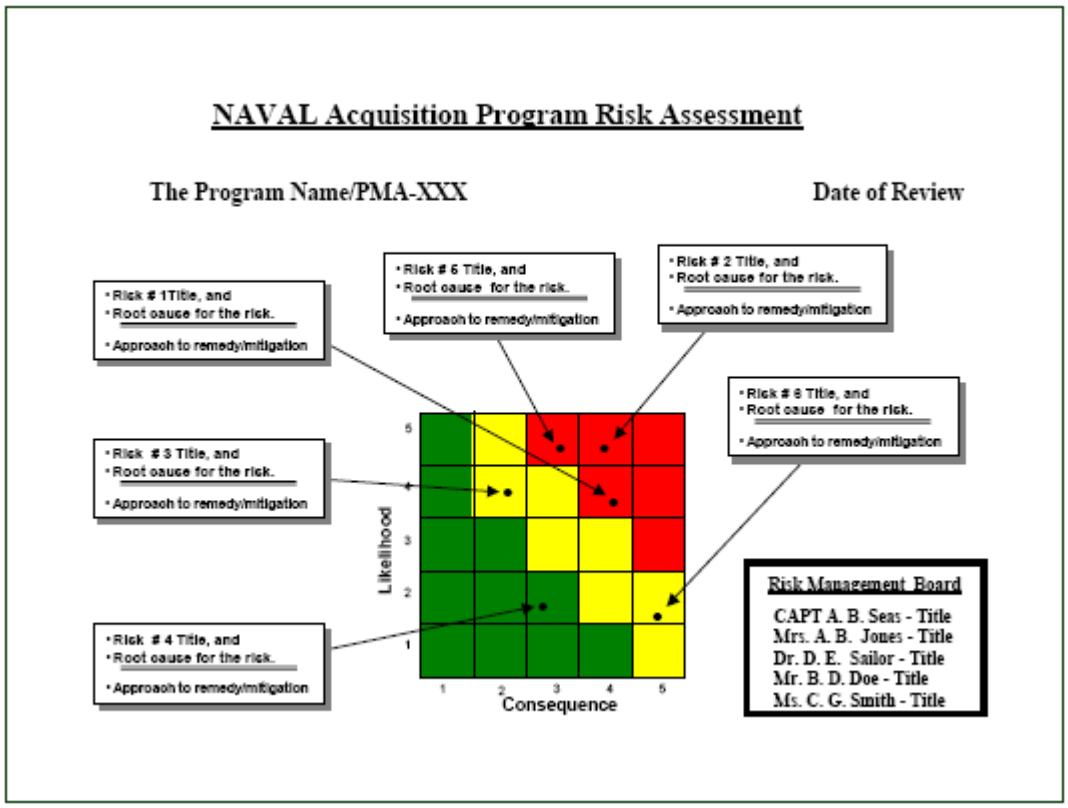
Risk Identification – What can go wrong?
Risk Analysis -- How big is the risk?
Risk Mitigation Planning – How can the risk be reduced?
Mitigation Plan Implementation – a PM function that addresses how the mitigation plan can be implemented?

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 Naval Systems Engineering Resource Center (NSERC) website at https://nserc.navy.mil/. The August 2006 DoD Risk Guide is an especially excellent document and has driven updates to NAVAIR's RM directives. Additionally, tailorable checklists for each Systems Engineering Technical Review (SETR) are available via this site.

14.28. POCs: Jennifer Young, APEO Engineering, AIR-1.0 Programs, (301) 757-4463

CHAPTER XIV: ENGINEERING DISCIPLINES

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

14.29. Successful development and acquisition of software is vital for acquiring naval warfighting and business systems. Software intensive systems are inherent in today's complex systems and are often the primary cost, schedule, and performance drivers in naval programs. The Assistant Secretary of the Navy (Research, Development and Acquisition) (ASN(RD&A)) developed a guidebook to provide a uniform framework for software improvement processes to assist Department of the Navy (DON) acquisition teams through all phases of software acquisition.

14.30. The Guidebook for Acquisition of Naval Software Intensive Systems is intended to provide support for the entire acquisition team by consolidating in one place background information, enterprise-wide policy, guidelines, proven alternatives, access to additional subject matter expertise, and amplifying detail for key software acquisition activities. It includes:

14.31. General information concerning DON and Department of Defense (DoD) software acquisition consideration at various stages of software acquisition planning: pre-solicitation, solicitation, source selection, and contract execution; amplifying guidance for ASN(RD&A) policy regarding software process improvement; assistance with implementation of mandated metrics; and assistance with understanding and implementation of Electrical and Electronic Engineers/Electronic Industries Alliance (IEEE/EIA) Standard 12207.

14.32. The Guidebook is located at: https://acquisition.navy.mil/rda/content/view/full/6079

CHAPTER XIV: ENGINEERING DISCIPLINES

PART H: SHIPS' C5I SYSTEMS MODERNIZATION PLAN (C5IMP)

14.33. Purpose

14.33.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, Computer systems and software, ships' Combat and Intelligence 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.

14.33.B. The C5IMP process is the tool for obtaining the applicable Fleet Commander's approval to install a proposed C5I system's ship alteration (SHIPALT). Aspects of this process include scheduling C5I Ship Alteration (SHIPALT) installations to ensure they are planned for installation during a ship's Modernization Window. The C5IMP process also involves the assurance and Certification of Interoperability for C5I systems and other certifications (see paragraph 14.37.B). The process thus involves the joint Systems Commands (SYSCOM), Type Commanders (TYCOM) and Fleet Commanders (FLTCOM) in a mutual process.

14.33.C. C5IMP is related to the Navy Modernization Process (NMP), formerly called the SHIPMAIN process, as detailed in NAVSEA 04's Maintenance Operations Manual (MOM), in that NMP 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 NMP regarding "Figure of Merit" (FOM) and budgets). NMP is also referred to as the "Entitled Process", and its related document is the "Ship Change Document" (SCD).

14.34. 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)
- CFFC/COMPACFLT INSTRUCTION 4720.3B (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 4720.4B (Commander United States Fleet Forces Commander (COMUSFLTFORCOM) / Commander United States Pacific Fleet (COMPACFLT) C5ISR Modernization Policy) N6 dtd 14 Oct 08
-- NAVAIRINST 5230.20A (Naval Warfare Systems Certification Policy) dtd 24 Aug 2012
- 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)
- NAVSEA INST 9410.2 | NAVAIR INST 5230.20 | SPAWAR INST 5234.1, Naval Warfare Systems Certification Policy, 18 Jul 05

14.35. Background

14.35.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 05H.

14.35.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.

14.35.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.

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

14.35.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.

14.36. 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.

14.37. Key Aspects

14.37.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 several methods of obtaining FLTCOM approval for a C5I system SHIPALT, as follows:

- conducting meetings at which proposed SHIPALTs are presented to the FLTCOMs, called **the Naval Networks and FORCEnet Enterprise (NNFE) Command and Control Communications, Computers, and Ships' Combat Systems (C5I) Modernization Conference (NCMC) which 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";

- writing a C5I "Risk Form" that is processed through the Electronic Configuration Control Board (eCCB), with eCCB members being from each SYSCOM, TYCOM, COMNAVCYBERFOR, and the applicable FLTCOM.

14.37.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;
- Information Technology (IT) Certification and its related Approval to Operate (ATO);
- 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
- Target Configuration Date (TCD) Waiver by the applicable FLTCOM.

14.38. 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. 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.

14.39. 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 by the FLTCOM. 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) formatted Risk Assessment message.

14.40. 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. **CUSFFC/COMPACFLT INSTRUCTION 4720.3B** specifies the format for the A-O message. The PM must submit the message for approval directly to the applicable Fleet Commander. **FLTCOM policy for approval of a TCD Offer is based on if the proposed SHIPALT:**

- **Corrects a CASREP (original language was "significant deficiency");**
- **Provides significant C5I capability (originally called "Fleet capability");**
- **Corrects a safety issue.**

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 05H can coordinate and assist in the preparation and submission of the A-O message.

14.41. 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.

14.42. 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.

14.43. Combat Systems Interoperability Test (CSIT). One of the deliverables that NAVSEA 05H is responsible for to the Fleet Commanders and Strike Group Commanders is a "certification" that the new C5I systems being installed in ships, and delivered to the Fleet for operational use, are both operable and interoperable. The resulting decision is called the Warfare Systems Certification Decision (WSCD). The Joint Systems Command Instruction, NAVSEAINST 9410.2 | NAVAIRINST 5230.20 | SPAWARINST 5234.1, Naval Warfare Systems Certification Policy, 18 Jul 05, governs this process. 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. Weapons Systems Integration and Interoperability Testing (WSI2T) is conducted interconnecting the systems integration laboratories of the applicable combat systems' Software Support Activities (SSA) and exercising the software and hardware in operational scenarios. This consortium use of the labs is known as the Distributed Engineering Plant (DEP). Meetings regarding readiness to commence WSI2T testing, and meetings held after testing that support the PCD decision are:

- Final Certification Readiness Review (FCRR): Meeting held prior to commencing WSI2T testing, with the expectation that systems and software are ready to commence testing. Any delay at this time may eventually affect the systems being ready for installation at commencement of the ship(s) Modernization Window (Availability). The decision at the FCRR meeting is to commence WSI2T testing on schedule.
- Warfare Systems Installation Assessment (WSIA): After WSI2T testing is completed, and resulting Trouble Reports have been analyzed for operational impacts of risk of occurrence and their severity, a meeting is held to discuss those testing results. The decision at the WSIA meeting is whether to actually commence installation of the systems' ship alterations (SHIPALT) during the ship's Modernization Window (Availability).
- Warfare Systems Certification Decision (WSCD): After ship installations are completed and systems have undergone their Systems Operational Verification Tests (SOVT), and the ship has undergone her Sea Trials following her Availability, a meeting is held to discuss results of those completed installations and testing. The resulting decision at the WSCD meeting is SEA 05H's "certification" that the new ship's combat systems are both operable and interoperable. The resulting naval message stating that certification for the applicable systems is one of the deliverables that is the responsibility of SEA 05H to the Fleet Commanders, Strike Group Commanders, and the applicable ships' Commanding Officers.

14.44. Capabilities and Limitations (CAPS&LIMS) Document. The other deliverable that is the responsibility of SEA 05H is the Capabilities and Limitations Document for the applicable systems that compose the newly installed system upgrades in ships. This document is a result of operational analysis based on systems descriptions and demonstrated capabilities during the previously held testing events. SEA 05W delivers this document to the Fleet Commanders, Strike Group Commanders, and the applicable ships' Commanding Officers so they will know the upgraded combat systems capabilities of their ships.

14.45. 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.

14.46. Information on the WEB: https://www.nde.navy.mil/ (for C5IMP, NDE-NM, Ship Change Documents, and AMPS)

14.47. POC: Andrew P. Miller, AIR-4.1.5, (301) 757-3252/(cell) (301) 481-7019

CHAPTER XIV: ENGINEERING DISCIPLINES

PART I: SOFTWARE DATA RIGHTS

14.48. Source Documents:

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

14.49. Intellectual Property

The following Intellectual Property (IP) discussion is usually applied to non-commercial software. Acquiring more than Standard rights for commercial software is often cost-prohibitive, but the cost must be carefully weighed against any potential benefits to the government. Program offices need to exercise care to ensure that the context into which COTS items are placed is defined with sufficient rights so that the government can pursue alternative solutions for future upgrades. That is, the interfaces to the COTS products must be available to the government. Also, while many offerors will appear to be providing all COTS, or make grand OA claims, this section still applies to whatever software is required to configure and integrate these COTS items into a system that operates as required. This software includes so-called "glue" code that enables integration, scripts that configure the COTS and the operating systems, database (e.g., Structured Query Language (SQL)) code that drives the COTS, and whatever else that is needed to make it all work. It is recommended that program managers use this section to better understand the requirements going into RFPs and to assure completeness. Table 7-1 describes the technical data rights associated with commercial data items, and Table 7-2 defines those rights for non-commercial items.

14.50. Overview

Intellectual property deals with the rights associated with the products produced by contractors, including the various software products. The establishment of IP terms and conditions is a critical aspect of any software acquisition activity. Without the proper data rights, programs will not be able to legally use their deliverables the way they want or need, regardless of what other portions of a contract appear to say. It is critical, legally speaking, that the RFP and the offeror's response distinguish between commercial and noncommercial software. Commercial software is set forth in DFARS 252.227-7014(a) as software developed or regularly used for non-governmental purposes and either 1) sold, leased, or licensed to the public; 2) offered for sale, lease, or license to the public; 3) doesn't meet the two prior conditions but will be available for commercial sale, lease, or license in time to satisfy the delivery requirements of this contract; or 4) meets any of the prior three conditions and would require only minor modification to meet the requirements of the contract. Commercial computer software should be acquired under the licenses customarily provided to the public unless such licenses are inconsistent with federal procurement law or do not otherwise satisfy user needs. For example, a commercial computer software license may be modified to refer to federal law instead of a particular state law or modified to request source code in order to support a program requirement to integrate the software into an existing system. Noncommercial software is any software that does not meet the description of commercial software. For noncommercial software the DFARS includes a standard set of license rights that delineate what the government can expect, but if these are either 1) not cited, 2) not exercised, or 3) not appropriate for the needs of the government, then the ability of the government to take full advantage of the products being acquired will be compromised. It is important to understand that, according to law, the contractor typically owns whatever they develop, such as computer software, computer software documentation, or technical data unless a special works clause is provided in the contract. The government only receives license rights to use these items. It is therefore crucial that the government negotiates license rights that are needed for any specific acquisition. The DFARS standard license language provides rights only if the DFARS clauses are placed into the contract. Even if cited however, it is possible that the rights might not meet the needs of any specific acquisition. Further, the government may have difficulty exercising its rights in software it does not possess. Appropriate Contract Data Requirements Lists or other contract deliverables should be prepared for any software that the government program intends to use, modify or distribute to other contractors. One effective strategy is to include in the RFP a statement based on DFARS 252.227-7017 that requires offerors to provide unlimited rights for all products except for those that they explicitly list. Beware of software tools that the offeror will use in producing their software. A specific CDRL item should call out tools and the IP or warranty on using them with specific settings to produce the deliverable software product. These details must be called out in the contract for any warranty or future modification or distribution to other government contractors.

14.51. Assessment of Planned Work - Data Rights Requirements Analysis

It is the responsibility of the contracting officer to put the proper data rights clauses into the contract, but it is the responsibility of the program office to provide the contracting officer with a complete assessment of the planned work effort. This assessment should include a determination of the contemplated present uses of the software or other deliverables as well as an assessment of any future uses of the software products or tools used in their production. This assessment is called a "Data Rights Requirements Analysis" (DRRA) and should be conducted prior to contract award using the offeror's response, 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 or the tools used to modify it. Programs should work within their Program Executive Offices (PEOs), sustainment or in-service maintainers, and across their Communities of Interest (COI) in considering future needs for data and other intellectual property rights in a structured, focused manner. The naval portfolio manager may also be able to help, but these contacts must be noted in the SSP or they may not be allowed during deliberations. The goal of this assessment is to identify opportunities or requirements for information and information product sharing and then to structure contracts accordingly. Such an assessment should include both a cross domain and enterprise-wide review of the component "marketplace" – both supply and demand. The results of this analysis should guide the program office in determining the intellectual property and intellectual property rights that it requires the contractor to deliver. If the DRRA determines that the standard data rights clauses do not provide sufficient rights to meet the program's needs and the future needs of the federal government, additional rights may be obtained later through negotiations with the contractor, usually at an additional cost. It is important to perform a trade-off analysis between the additional cost and the benefits realized from obtaining the rights. Tables 7-1 and 7-2 summarize the different characteristics of each rights category including Small Business Innovation Research (SBIR) rights, along with criteria for their application.

Commercial Technical Data (TD) and Computer Software (CS) Data Rights Assertion Categories				
Rights Category	**TD or CS?**	**Criteria for Applying Rights Category**	**Permitted Uses Within Government**	**Permitted Uses Outside Government**
Standard DFARS "7015" Rights	TD only	Default category for all commercial TD (TD pertaining to commercial items) except those qualifying for Unlimited Rights.	Unlimited; except may not be used for manufacture.	Only with contractor's written permission or for emergency repair/ overhaul.
Unlimited Rights (UR)	TD only	Commercial TD that: 1) has previously been provided to government or is already publicly available without restrictions; 2) is "form, fit and function"; 3) is a correction to TD previously delivered to the government; 4) has been provided to the government with UR from a prior contract; or, 5) is necessary for operation, maintenance, installation or training.	Unlimited; no restrictions	
Standard Commercial License	CS only	Default rights category for all commercial CS.	As specified in the license customarily offered to the public. DoD must negotiate for any specialized needs, or if any of the license terms are unacceptable to the government.	
Specifically Negotiated License Rights	Both TD and CS	Mutual agreement of the parties; should be used whenever the standard categories do not meet both parties' needs.	As negotiated by the parties; however, by statute, the government cannot accept less than the minimum standard 7015 rights in commercial TD.	

Table 7-1. Commercial TD and CS Data Rights Assertion Categories[4]

Non-Commercial Technical Data (TD) and Computer Software (CS) Data Rights Assertion Categories				
Rights Category	**TD or CS?**	**Criteria for Applying Rights Category**	**Permitted Uses Within Government**	**Permitted Uses Outside Government**
Unlimited Rights (UR)	TD and CS	Applies to: 1) TD/CS that is developed exclusively at government expense; 2) TD that is test data; 3) TD that is form, fit and function data; 4) TD that is necessary for operation, maintenance or training; 5) Corrections or changes to TD/CS previously delivered to the government; 6) TD/CS otherwise publicly available; 7) CS documentation deliverables; and, 8) TD/CS whose GPR have expired.	Unlimited; no restrictions. Note: If a third party copyright is asserted in TD/CS that is delivered with UR, under DFARS 227.7203-9 the delivering contractor must grant or obtain for the government license rights that permit the government to reproduce, perform or display the software or documentation; distribute copies; and, through the right to modify data, prepare derivative works. If the contractor does not obtain an appropriate license for the government, then the contractor should not incorporate the unlicensed copyrighted material into the deliverable TD/CS without the Contracting Officer's written approval	
Government Purpose Rights (GPR)	TD and CS	Development with mixed funding.	Unlimited; no restrictions.	For "Government Purposes"; no commercial use. Must have recipient sign a Non-Disclosure Agreement (NDA).
Limited Rights (LR)	TD only	Development exclusively at private expense.	Unlimited; except may not be used for manufacture.	Emergency repair/overhaul; evaluation by foreign government; may also disclose subject to a prohibition on any further disclosure after notifying the asserting contractor.
Restricted Rights (RR)	CS only	Development exclusively at private expense	Government may: 1) Use on one computer at a time; 2) Transfer to another government entity (transferor must destroy all copies); 3) Make minimum backup copies; and 4) Modify, provided there is no release or disclosure outside government.	Emergency repair/overhaul (w/NDA). Support contractors may use (w/NDA).
Prior Government Rights (DFARS 252.227-7028)	Both TD and CS	Whenever government has previously acquired rights in the deliverable TD/CS.	Same as under previous contract.	
Specifically Negotiated License Rights (SNLR)	Both TD and CS	Mutual agreement of the parties; use whenever the standard categories do not meet both parties' needs.	As negotiated by the parties; however, must not be less than LR in TD and must not be less than RR in CS.	
SBIR Data Rights	Both TD and CS	Whenever TD/CS is generated under a SBIR contract, **regardless of funding**. SBIR Data Rights expire five years after completion of the SBIR project from which such TD/CS were generated.	Within government, use and disclosure is unlimited.	Cannot release or disclose SBIR data outside of government, other than support services contractors, except: 1) As expressly permitted by the contractor; 2) For evaluation purposes; or, 3) For emergency repair or overhaul. When disclosed outside government, an NDA is required.

Table 7-2. Non-Commercial TD and CS Data Rights Assertion Categories[5]

14.52. Principles of DRRAs

There are some principles to consider when performing a data rights assessment:

- Data rights issues are complex and require careful examination of the program's requirements and overall "fit" within the enterprise. Establishing the data rights strategy for a program requires expert guidance from government attorneys and the contracting officer to determine the best strategy.
- Proper experts should be used to review program data rights requirements – strategy development should involve software and architecture experts, an intellectual property lawyer, a contracting officer and the Program Manager.
- It is typically very expensive to acquire the broader data rights or to create additional options for software maintenance after the initial contract is in place. 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. Sole sources have little incentive to offer lowest cost.
- Insufficient data rights prevent the government from using deliverables in the most optimal way.
- Data rights will impact maintenance over 30 or more years of a system's life.
- Programs should perform a Business Case Analysis (BCA) as a part of assessing the IP needs to determine whether obtaining the desired rights is the correct business decision.

14.53. DRRA Considerations

A DRRA should address the following issues:

- Is this a new or existing procurement?
- What type of procurement or assistance vehicle is/will be involved (Federal Acquisition Regulations (FAR)/DFARS contract, grant or cooperative agreement).
- Does the government already have data rights in existing software or other deliverables that permit the government to leverage (i.e., modify and/or enhance) that existing software for this new contracting effort (including necessary architecture/design/interface documentation)?
- What clauses already exist regarding data rights?
- What are the benefits of broader data rights clauses? For example, will acquiring more than restricted/limited rights impact procurement cost without providing value?
- 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?
- Will the government obtain at least Government Purpose Rights? If not, is the asset isolated at the lowest component level? If not, is it non-critical? If not, what is the justification for less than GPR?
- Has the Program identified potential components and artifacts that can be provided to the offerors as Government Furnished Information (GFI)?
- Does the government have the right to provide the information to third parties? If not, should the government negotiate a license for this right?
- 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., Foreign Military Sales (FMS) or commercial)?
- Does the government require the rights to modify the deliverables now or in the future (modifications include updates, corrections and enhancements)?
- Will the government need special tools to be able to modify the deliverables?
- Do the components to be acquired fit within an existing, approved government architecture, or can they be easily modified to fit into an approved architecture? Does the government have sufficient rights to perform this modification?
- Does the government need to maintain configuration control over the deliverables? If so, the government needs to obtain sufficient license terms to perform this maintenance.

14.54. When performing the DRRA, it is important 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 the contractor and the government need to accomplish the stated objectives. If additional rights are required, the contracting officer can enter into negotiations with the contractor to acquire such rights. Other Sources of Information about Intellectual Property Rights: The Federal Acquisition Regulations (FAR) and Defense Federal Acquisition Regulations (DFARS) are the primary sources of information regarding data rights. Applicable FAR/DFARS intellectual property/technical data/software provisions include:

- FAR 52.227-11, Patent Rights – Retention by the Contractor (Short Form);
- FAR 52.227-12, Patent Rights – Retention by the Contractor (Long Form);

- DFARS 252.227-7013, Rights in Technical Data – Noncommercial Items;
- DFARS 252.227-7014, Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation;
- DFARS 252.227-7015, Technical Data – Commercial Items;
- DFARS 252.227-7016, Rights in Bid or Proposal Information;
- DFARS 252.227-7017, Identification and Assertion of Use, Release, or Disclosure Restrictions;
- DFARS 252.227-7018, Rights in Non-commercial Technical Data and Computer Software – Small Business Innovation Research (SBIR) Program;
- DFARS 252.227-7019, Validation of Asserted Restrictions – Computer Software;
- DFARS 252.227-7020, Rights in Special Works
- DFARS 252.227-7025, Limitations on the Use or Disclosure of Government- Furnished Information Marked with Restrictive Legends;
- DFARS 252.227-7027, Deferred Ordering of Technical Data or Computer Software;
- DFARS 252.227-7028, Technical Data or Computer Software Previously Delivered to Government;
- DFARS 252.227-7030, Technical Data – Withholding of Payment; and
- DFARS 252.227-7037, Validation of Restrictive Markings on Technical Data.

FAR/DFARS materials can be accessed at http://www.acq.osd.mil/dpap/sitemap.html

CHAPTER XIV: ENGINEERING DISCIPLINES

PART J: TECHNOLOGY/PROGRAM PROTECTION

14.55. Purpose. This section outlines NAVAIRs implementation of Department of the Navy (DoN) standard and approved processes for developing a Program Protection Plan (PPP), to include the identification of Critical Program Information (CPI) and mission critical components known as a Criticality Analysis for NAVAIR Research Development and Acquisition (RDA) Programs. NAVAIRs RDA programs include Acquisition Category (ACAT) I-IV programs, Abbreviated Acquisition Programs, Rapid/Quick Reaction Deployment Programs, Demonstrators, Technology Spirals, Formal Engineering Change Proposals (ECP) and Small Business Innovation Research (SBIR) efforts (when transitioned to a PMA or AIR/AD Code).

14.56. Source Documents.

a. DoDI 5200.39, "Critical Program Information (CPI) Protection within the Department of Defense," 16 Jul 08, change 1 incorporated 28 Dec 10 (specifically, enclosure (2), paragraph 5.c(7)(e))
b. DoDI 2040.02, "International Transfers of Technology, Articles, and Services," 10 Jul 08
c. DoDI 5000.2, "Operation of the Defense Acquisition System," 2 Dec 08
d. SECNAVINST 5000.2E, "Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integrating and Development System," 1 Sep 11
e. Principal Deputy Under Secretary of Defense Memorandum, "Document Streamlining – Program Protection Plan," 18 Jul 11
f. DASN RDT&E Memo, "DoN Implementation of Program Protection Plan," 9 Feb 12
g. ASN(RD&A) Memo, "Required Use of Standardized Process for identification of Critical Program Information (CPI) in DON Acquisition Programs," 20 Feb 08
h. DoDI 5200.44, "Protection of Mission Critical Functions to Achieve Trusted Systems and Networks," 5 Nov 12
i. NAVAIRINST 5510.38, "NAVAIR National Security Program," 7 Feb 13 (specifically, enclosure (8))
j. USD(AT&L) Memo, "Horizontal Protection of DoD Critical Program Information," 22 Jul 10
k. Defense Acquisition Guidebook, 1 Oct 12

14.57. Definitions.

Critical Program Information (CPI) – Per reference (a); "Elements or components that, if compromised could: cause significant degradation in mission effectiveness; shorten the expected combat-effective life of the system; reduce technological advantage; significantly alter program direction; or enable an adversary to defeat, counter, copy, or reverse engineer the technology or capability."

Critical Technology (CT) – Per reference (b); "Technology or technologies essential to the design, development, production, operation, application, or maintenance of an article or service which makes or could make a significant contribution to the military potential of any country, including the United States. This includes, but is not limited to, design and manufacturing know-how, technical data, keystone equipment, and inspection and test equipment."

Mission Critical Components (MCC) – Per reference (h); "A component which is or contains information communication technology (ICT), including hardware, software, and firmware, whether custom, commercial, or otherwise developed, and which delivers or protects mission criticality functionality of a system or which, because of the system's design, may introduce vulnerability to the Mission Critical Functions (MCF) of an applicable system."

14.58. Responsibilities.

14. 58.A. *NAVAIR Program Managers* (PMs) are responsible for ensuring their respective RDA programs are assessed for CPI and mission critical components, implementing countermeasures and developing a PPP in accordance with references (a), (c) – (f) and (i). The PM is responsible for assigning a Program Protection Lead (PPL), ensuring personnel are available to support the PPL by participating in the process of identifying potential CPI, conducting criticality analysis for MCC, and identifying countermeasures.

14. 58.B. *Program Protection Lead* (*PPL)* is the individual (Government, contractor or military) assigned by the PM as the primary POC for coordinating completion of the CPI identification process, Criticality Analysis (CA), identifying and implementing countermeasures, conducting vulnerability and risk assessments, and developing a PPP. Additionally, the PPL is required to ensure the CPI and PPP are uploaded into the Acquisition Security Database (ASDB) per references (e) – (g) and (i) – (k).

14. 58.C. *NAVAIR Technology Protection Division Head* (*AIR 7.4.3*) is responsible for providing Technology/Program Protection guidance; validating and endorsing all NAVAIR CPI Surveys, CPI Identification Assessment results, CPI Approval Memoranda, and PPPs; and, maintaining an online repository of policy guidance and supporting templates located on https://mynavair.navair.navy.mil (Security 7.4, Technology Protection).

14. 58.D. *Operations Security (OPSEC) Manager (AIR 7.4.4)* is responsible for providing OPSEC guidance for protection of unclassified Critical Information (CI) and CPI.

14. 58.E. *Lead Engineer, SW/HW Engineer, Technical Experts, etc*. *(AIR 4.1)* represent programs as Subject Matter Experts (SMEs) under the direction of the PM/PPL, participate in the CPI Identification process, conduct the CA and are responsible for system security engineering.

14. 58.F. *Principal NAVAIR Foreign Disclosure Authorities (AIR 7.4.1)* are the Designated Disclosure Authorities (DDAs), who have broad disclosure responsibility regarding release of Classified Military Information (CMI) and Controlled Unclassified Information (CUI), some of which may be categorized as CPI. DDAs support the process through expertise in foreign information exchange matters and potential foreign interests in program information.

14. 58.G. *Naval Criminal Investigative Service (NCIS)* provides Counter-Intelligence (CI) support through analyzing reports on CPI, and developing a CI Support Plan.

14.58.H. *Defense Intelligence Agency (DIA)* provides threat analysis products regarding suppliers of MCC.

14.58. I. *Scientific and Technical Intelligence Liaison Officer (STILO)* (*AIR 4.12*) provides intelligence support and liaison with the Office of Naval Intelligence (ONI)/DIA on CAPSTONE/System Threat Assessment Reports.

14. 58.J. *Information Security (AIR 7.4.1)* is responsible for providing guidance on adequate protection of sensitive and classified information, specifically through the development and implementation of Security Classification Guides (SCG).

14. 58.K. *Anti-tamper Engineering (AIR 4.1.14)* is responsible for providing guidance and support in Systems Engineering activities to impede reverse-engineering of CPI which is onboard the weapons system/platform/trainer.

14. 58.L. *Information Assurance (AIR 7.2.6)* is responsible for ensuring the confidentiality, integrity, availability, non-repudiation, and authorization of digitized information, information systems and networks against unauthorized access to or modification, whether in storage, processing, or transit, and protection against the denial of service to authorized users, including measures to detect, document and counter such threats during development, testing, deployment, and disposal across the enterprise architecture.

14.58.M. *Software Assurance (AIR/AD 4.1)* is responsible for managing and ensuring the levels of confidence that software functions as intended and is free of vulnerabilities, either intentionally or unintentionally designed or inserted as part of the software throughout the lifecycle.

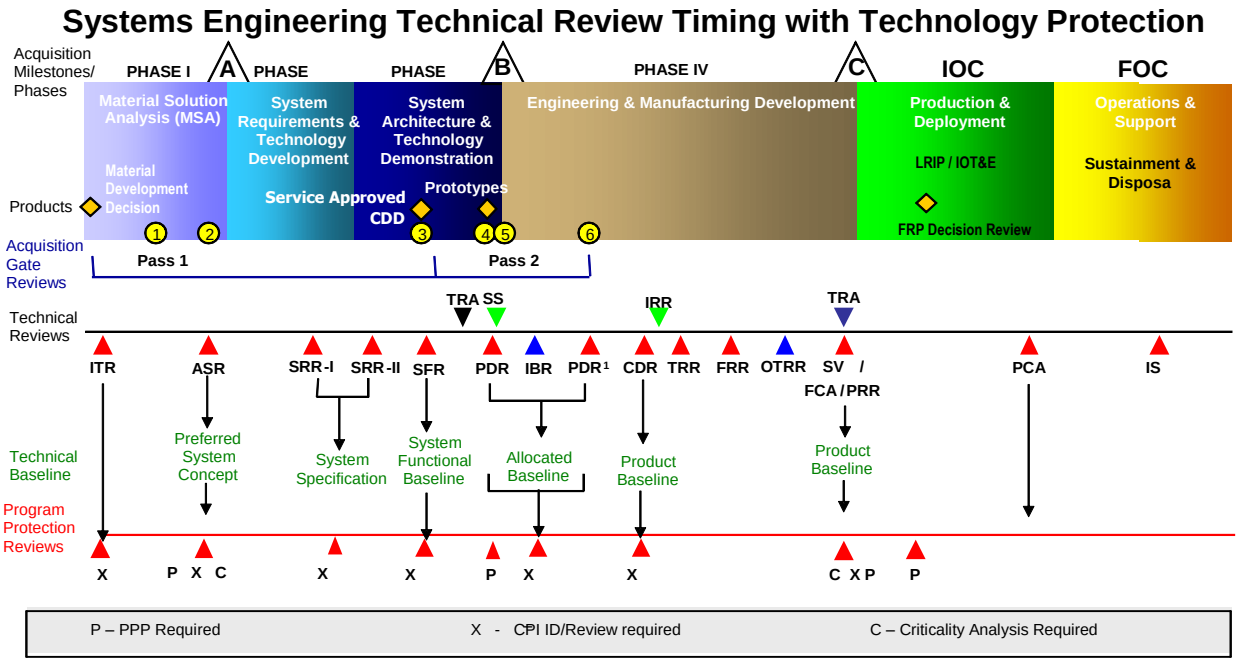
14.58.N. *Supply Chain Risk Management Lead (AIR 4.1)* is responsible for the systematic process for managing supply chain risk by identifying vulnerabilities and threats throughout the "supply chain" and developing mitigation strategies to combat those threats whether presented by the supplier, the supplied product and its subcomponents, or the supply chain (e.g., initial production, packaging, handling, storage, transport, mission operation and disposal).

14.59. Discussion. United States military superiority is dependent on advanced technology and the ability of that technology to survive the ever emergent "hostile intelligence collection environment" across the acquisition lifecycle. Technology/Program Protection comprises: (1) the component/systems/integration engineering competencies' identification of components and/or elements within the system, which if compromised, meet one of the five criteria of

CPI; (2) the identification of MCF and MCCs which enable the system to perform the functions; and, (3) the engineering/security/intelligence competences' identification and implementation of appropriate "cost effective" countermeasures to protect CPI and minimize the risk that DoD Warfighting mission capabilities will be impaired due to vulnerabilities in system design, sabotage or subversion of a system's MCC/F.

Critical Technologies normally require countermeasures; but, may or may not meet any of the criteria for CPI.

CPI and MCC/F are tied to the "Technical Baseline" and require re-evaluation as the technology baseline matures. CPI and MCC/F identification and appropriate countermeasures start at the beginning of a research initiative or an acquisition program. Re-assessment of CPI and the CA to identify MCC/F follow the Systems Engineering Technical Review (SETR) process and become part of the Technical Baseline. As ECPs are integrated within the Technical Baseline, any ECP that changes the Technical Baseline should be evaluated for CPI and MCCs. As shown below, a PPP is required at Milestones A, B, C and FRP for Milestone Decision Authority. A CPI assessment and CA are required at ITR, ASR, SRR-I, SFR, PDR, CDR and SVR/FCA.



CPI and MCC/F need to be identified *up front and early*, and re-assessed throughout the acquisition lifecycle in conjunction with the SETR process.

It is beneficial the prime contractor be involved in identification of CPI, MCC/F and countermeasures. These benefits include the following: (1) the prime contractor is responsible for product design, which includes CPI and MCC; (2) Government and prime contractor collaboration results in cost effective trades in "total ownership costs" since countermeasures are part of the engineering process; (3) the prime contractor integrates Program Protection into their Integrated Master Schedule (IMS); (4) the prime contractor has a vested profit interest to meet cost, schedule, and performance (which includes Program Protection) in deploying their products in the Fleet; (5) addition of a Government Quality Assurance (QA) process, which is lacking when the Government alone conducts the CPI and MCC identification/analysis; (6) the risk to the Government that some CPI and MCC may not have been identified is reduced; and, (7) other than formal preparation of the updated CPI and MCC lists and associated countermeasures documents for PDR and CDR, the engineering effort and associated engineering costs are already in the prime contractor's contract requirements.

14.60. Critical Program Information (CPI) Identification Process.

The PM or designee shall: (1) submit a CPI Survey to AIR 7.4.3; (2) if "Potential CPI" is identified, the PM assigns a PPL; (3) the PPL establishes a PPIPT with appropriate program SMEs; (4) the PPIPT completes CPI identification

training; (5) the PPL facilitates/oversees the PPIPT in identification of CPI by using the Navy CPI WBS Tool and the ASDB; and, (6) the PPL obtains AIR 7.4.3 concurrence on the completed CPI WBS Tool. The NAVAIR CPI Assessment Process and templates are located on https://mynavair.navair.navy.mil (Security 7.4, Technology Protection) and the Program Management Community Web Tool, Templates.

14.61. No CPI.

If No CPI, per the determination by AIR 7.4.3 and the PM/designee based on the CPI Survey and/or CPI Identification WBS Tool Assessment, the PPL shall develop a PPP in accordance with references (a), (c) – (f) and (i). A tailored PPP will be used to document the results of No CPI. AIR 7.4.3 shall provide the applicable tailored PPP template once the PM has approved the CPI Approval memorandum.

14.62. CPI Approval and Countermeasures or security activities.

If CPI is identified upon completion of the CPI Identification WBS Tool, the PPL shall draft a CPI Approval memorandum, which will contain the CPI and countermeasures, for PM approval. A CPI Approval memorandum template is located on https://mynavair.navair.navy.mil (Security 7.4, Technology Protection) and the Program Management Community Webtool, Templates. The following general security, engineering countermeasures and security activities shall be considered; reference (k), Chapter 13, section 13.7 provides more specific details:

a. Communications Security
b. Industrial Security
c. Information Security
d. Operations Security
e. Personnel Security
f. Physical Security
g. Systems Security Engineering
h. Foreign Disclosure/Agreement
i. Anti-tamper
j. Software Assurance
k. IA/Network Security
l. Supply Chain Risk Management
m. Transportation Management
n. Dial-down Functionality
o. Training

14.63. Criticality Analysis (CA) Process.

The PM/PPL shall: (1) submit an Applicable System Survey to AIR 7.4.3; (2) if acquisition is an Applicable System, the PPL and Lead System Engineer shall conduct a CA in accordance with reference (k), Chapter 13, Section 13.3.2.1; (3) populate appendix C and various sections of the USD PPP template, reference (e);(3) if the acquisition does not meet the definition of an applicable system, the PPL will coordinate with AIR 7.4.3 regarding a tailored PPP to document the results of the CPI assessment and the CA.

14.64. MCC/F Countermeasures and Security Activities.

If MCC/Fs have been identified based on completing the CA, the PPL shall, with the support of the PPIPT, identify and select countermeasures and security activities to protect the identified MCC/F. Refer to section 14.62 for general, engineering countermeasures and security activities.

14.65. Threat Assessments.

The PM/PPL shall: (1) complete a Counterintelligence Threat Assessment (CITA) request for analysis of CPI and submit to NCIS; (2) complete a Supply Chain Risk Management Threat Assessment Center (SCRM TAC) request form for analysis of the vendors for all MCCs and submit via SIPRNET to the DoN SCRM POC (currently a NAVSEA rep).

Upon receipt of NCIS and DIA threat reports, the PPIPT shall re-assess countermeasures and modify as needed, subsequently updating the PPP.

14.66. Program Protection Plan.

The PPL shall develop a PPP per references (a), (c) – (f) and (i) for all acquisition programs regardless of whether CPI, MCC/MCF exist. A USD PPP template for all ACAT IDs and acquisitions with CPI and/or MCC/F is located on https://mynavair.navair.navy.mil (Security 7.4, Technology Protection) and the Program Management Community Web Tool, Templates. When an effort has no CPI and no MCC/F, the PMs shall use a tailored PPP, which AIR 7.4.3 will provide at the completion of the CPI assessment and MCC/F CA.

14.67. Distribution.

Until the PPP is final, the PM/PPL shall distribute the approved CPI and countermeasures to appropriate Government sites and contractors where the CPI and any MCC/F will be stored, handled and/or processed. The PM will require those contractors who will handle, store and/or process the Government CPI and MCC/F at the contractor facility to develop and deliver a Program Protection Implementation Plan (PPIP) to the PM for approval. The PPIP shall address how the contractor will protect CPI and MCC/F. A PPIP CDRL is located at https://mynavair.navair.navy.mil (Security 7.4, Technology Protection, Contracts) and at https://mynavair.navair.navy.mil (Security 7.4, Industrial Security, DD form 254 Manual).

14.68. POC: Don Bernard, AIR 7.4.3, (301) 757-6420, Dan Prasada-Rao, AIR 7.4.3, (301) 342-4446.

CHAPTER XIV: ENGINEERING DISCIPLINES

PART K: TECHNOLOGY READINESS ASSESSMENT / TECHNOLOGY MATURITY ASSESSMENT

14.71. Purpose. A Technology Readiness Assessment (TRA) is a systematic, metrics-based process that is used to assess the technology maturity of immature technologies. The TRA is identified in the Department of Defense Instruction (DoDI) 5000.02 as a regulatory requirement for Major Defense Acquisition Programs (MDAPs) at Milestone (MS) B, and in Secretary of the Navy (SECNAVINST) 5000.2E for all Acquisition Categories (ACATs) TRAs are required for MS B and MS C. Additionally, MDAPs are required to comply with Title 10 United States Code (U.S.C.) 2366b at MS B (i.e., the milestone decision authority (MDA) is required to certify that all immature technologies have been demonstrated in a relevant environment; that is technology readiness level (TRL) 6). Non-MDAPs are required to meet the same TRL 6 requirement per NAVAIR best practice but no statute applies. A TRA is formally requested by the Program Manager (PM) through the NAVAIR TRA Chairman and conveyed to the Office of Naval Research (ONR). The TRA is coordinated and conducted by the NAVAIR Independent Technical Review Office (ITRO), with cooperation of the program office, via the NAVAIR TRA Chairman and Office of Naval Research (ONR) co-Chairman with the assistance of an independent team of subject matter experts (SMEs). For NAVAIR, the authority to conduct TRAs was delegated by AIR-4.0 Research and Engineering and acknowledged by the Science and Technology (S&T) Executive, Chief of Naval Research (CNR), to the NAVAIR TRA Chairman. For ACAT I and II programs, TRA findings are briefed by the NAVAIR TRA Chairman and the ONR co-Chair to the CNR for concurrence and passage to the MDA. TRA findings are provided to the Assistant Secretary of Defense for Research and Engineering, ASD(R&E), with copy to the Assistant Secretary of the Navy for Research, Development, Test and Evaluation (ASN(RDT&E)), for MDAPs. For ACAT 1C (when delegated) and II programs, TRA findings are provided directly to ASN (RDT&E). The NAVAIR TRA Chairman provides TRA findings to the applicable Program Executive Officer (PEO) as MDA for ACAT III and IV programs. A TRA plan is documented by the ITRO with the program at the beginning of each TRA to establish a Plan of Action and Milestones (POA&M) and coordination details. The plan is socialized with all key stakeholders (e.g., ONR and ASD(R&E) for awareness and planning,

14.71.A. A TRA is conducted for entry into MS B and C as delineated above. The TRA depends on system prototype demonstration artifacts to assess technology readiness of immature technologies, i.e., Critical Technology Elements (CTEs). A CTE is assigned a TRL by an independent review panel (IRP) of SMEs. The IRP, identified by the TRA Chairman and agreed to by ONR (when applicable), include SMEs from across NAVAIR competencies, ONR, other services and agencies, and academia. Although TRLs serve as a key knowledge-based metric for assessing technology maturity, actual assignment of a TRL is dependent upon expert professional judgment by the IRP. Note, only a CTE is assigned a TRL. If no CTEs are identified, then there are no TRLs. A TRA is completed in source selection on all proposals in response to a MS B request for proposal (RFP) or other Engineering and Manufacturing Development (EMD) initial entry point.

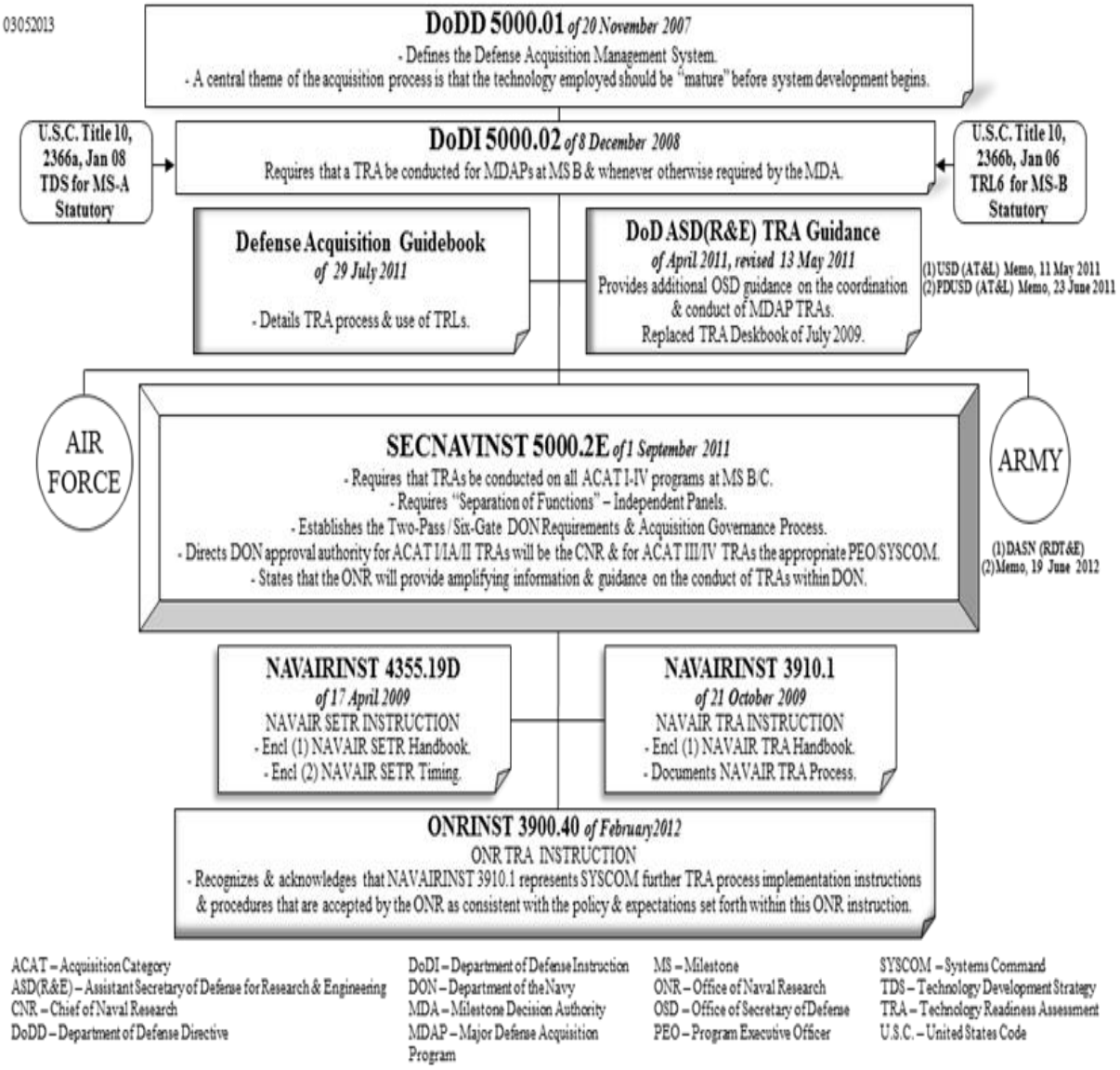
14.71.B. A preliminary TRA (Pre-TRA) is required prior to MS B in support of the preliminary-EMD decision acquisition board review as an initial assessment based on best available data. The Pre-TRA is used by the MDA as an early assessment of technology risk to meet Title 10 U.S.C. 2366b and considered an important input in the decision to release the EMD RFP. The Pre-TRA follows the same process as the formal MS B TRA but is limited by the best available data at that time and immature technologies are acknowledged as "candidate" CTEs until subsequent receipt of actual design proposals.

14.71.C. In support of MS A and Pre-MS A Analysis of Alternatives (AoA), a Technology Maturity Assessment (TMA) is conducted to assess the risk of identified "candidate" CTEs to achieve TRL 6 by MS B. A TMA follows the same process as the TRA and is also coordinated through the ITRO and TRA Chairman. The increasing pressures to deliver enhancing capabilities using streamlined acquisition models requires due diligence to ensure immature technologies identified prior to MS B do indeed mature at a sufficient rate to achieve TRL 6. Therefore, a Technology Maturation Plan (TMP) is required for each identified candidate CTE.

14.71.D. A TRA and TMA both follow the same rigorous and disciplined process, with the distinction that a TRA is conducted on the actual proposed or instantiated system design, while a TMA is conducted on a system design that has not yet been finalized (pre-MS B), or is not in response to a regulatory requirement, and could be requested at anytime along the DoD acquisition lifecycle (i.e., customer request for risk mitigation). TMA findings, along with

evolutionary incremental technology insertion planning, are to be included in the program's Technology Development Strategy (TDS). TRA findings are to be included in the program's Acquisition Strategy (AS) and Systems Engineering Plan (SEP).

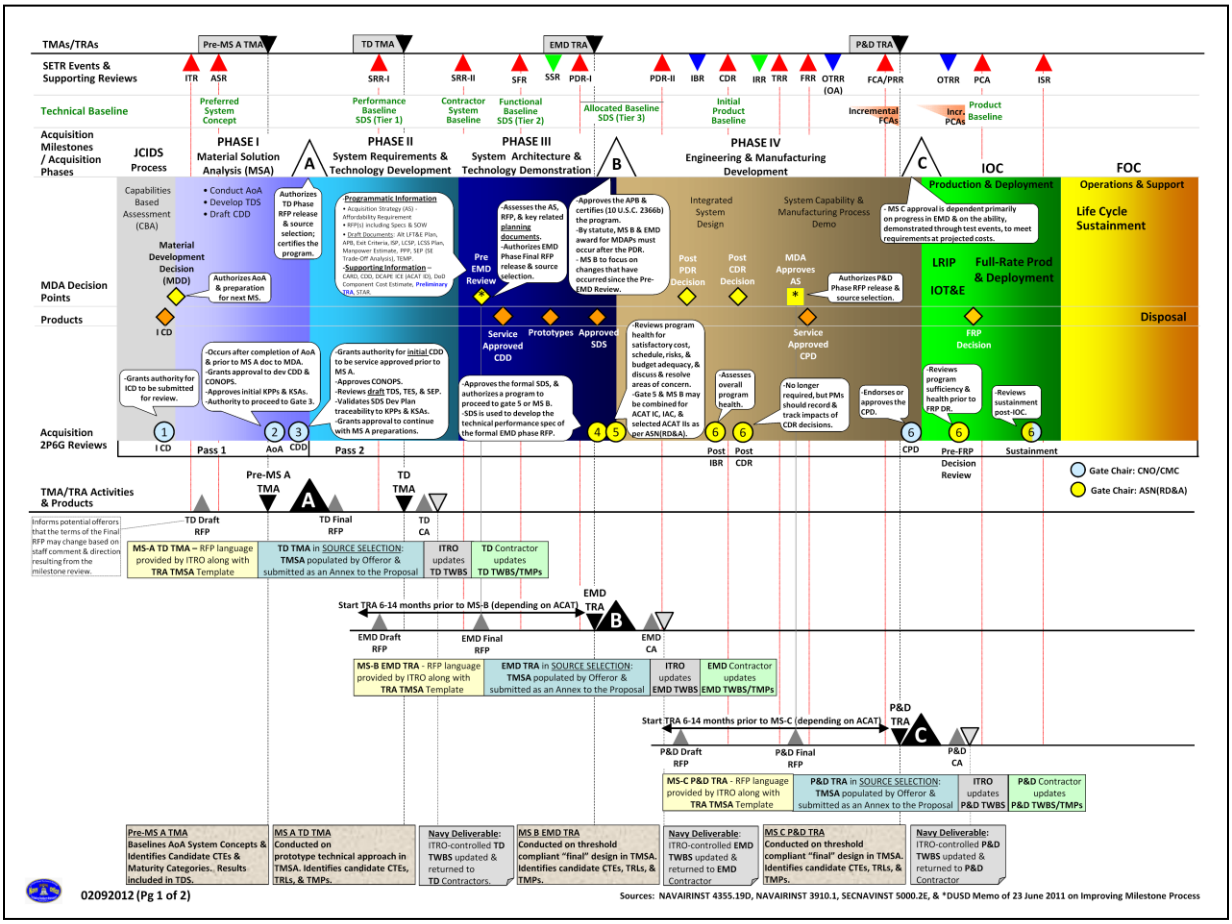
14.72. Source Documents:



14.73. Discussion.

14.73.A. NAVAIRINST 3910.1 of 21 October 2009 establishes policy, outlines the NAVAIR TRA Process, and assigns responsibilities for the planning, conduct, reporting, and certification of TRAs for ACAT I – IV programs aligned to NAVAIR, and to disseminate its respective enclosure, NAVAIR TRA Handbook, Version 2.0, Feb 2012 as guidance.

14.73.B. Systems Engineering Technical Review (SETR) checklists, found at the Naval Systems Engineering Resource Center (NSERC) website, contain TMA and TRA specific questions for each SETR event. (See figure below).



Acquisition Management: SETR/TMA/TRA Events and Timelines Chart

14.73.C. A TRA is required by DoDI 5000.02 for MDAPs at Milestone B (or at a subsequent Milestone if there is no MS B). It is also conducted whenever otherwise required by the MDA. The TRA final report for MDAPs must be submitted to ASD(R&E) for review to support the requirement that ASD(R&E) provide an independent assessment to the MDA.

14.73.D. To reduce the risk associated with entering EMD, DoDI 5000.02 requires RFPs to include language that prevents the award of an EMD contract if it includes CTEs that have not been adequately demonstrated. A system/subsystem prototype or model demonstration in a relevant environment (i.e., TRL 6) is a key benchmark in assessing technology readiness to enter the EMD phase. As such, a generic TRA of available technologies on the market and not specific to a technical solution of a proposed system concept would be insufficient for a Milestone B TRA but could be part of a pre-Milestone B TMA.

14.73.E. In accordance with an USD (AT&L) memo titled *For Component Acquisition Executives, Subject: Improving TRA Effectiveness*, dated 11 May 2011**:**

- A TRA is required for MDAPs at MS B (or at a subsequent milestone if there is no MS B) to support the independent review and assessment by the ASD (R&E).
- The ASD (R&E) will determine whether the technology of the program has been demonstrated in a relevant environment to support the MDA's certification under 10U.S.C. § 2366b.
- TRAs for the ASD (R&E) are not required for Major Automated Information System programs, non-MDAPs, or MDAP MS C decisions, except for MDAPs entering the acquisition system at MS C.

- ACAT II- IV programs should conduct TRAs in accordance with relevant Component direction by tailoring the "TRA Guidance" as appropriate.

14.73.F. In accordance with *DoD TRA Guidance*, prepared by the ASD (R&E), dated April 2011, revision posted 13 May 2011:

- TRAs that must be submitted to ASD (R&E) are required only for MDAPs that require certification under *10 United States Code (U.S.C.) §2366b* or other provisions of law, or when otherwise directed by the MDA.
- Generally, TRAs are not required for MDAPs at MS C.
- MDAs for non-ACAT I programs should consider requiring TRAs for those programs when technological risk is present.

14.73.G. In accordance with USD (AT&L) memo titled *For Secretaries of the Military Departments, Subject: Improving Milestone Effectiveness*, dated 23 June 2011:

- A preliminary version of the TRA final report will be presented at the pre-MS B MDA Review prior to RFP release for the EMD phase.

14.73.H. In accordance with a Deputy Assistant Secretary of the Navy (DASN) for Research, Development, Test and Evaluation (RDT&E) memo titled *TRAs at MS C*, dated, 19 June 2012:

- Consistent with current ASD (R&E) policy and with the continuing effort to streamline the acquisition process, effective immediately, Assistant Secretary of the Navy for Research, Development and Acquisition (ASD(RD&A)), will no longer require a TRA as part of a MDAP MS C review.
- Non-MDAP programs should conduct TRAs in accordance with current SECNAVINST 5000.2E guidance. (Note that all non-MDAP programs will continue to require MS C TRAs consistent with SECNAVINST 5000.2E.)

14.74. POC: Edward J. Copeland, AIR-4.0 NAVAIR TRA Chairman, and AIR-4.5E National Chief Avionics Engineer, (301) 342-9154.

CHAPTER XV: OTHER KEY TOPICS

PART A: TEAMING

15.1. Purpose. Teaming refers to the cooperation of Government entities/individuals, including Program/Project/Acquisition Manager (PM/AM), the Contracting Officer, the Defense Contract Audit Agency (DCAA), the Defense Contract Management Agency (DCMA), AIR-4.2 cost estimators, and other activities such as the Navy Price Fighters, to support a procurement from the planning phase through the negotiation and award phases. Teaming enables concurrent versus serial completion of required efforts, including those associated with proposal analysis. For sole source procurements, teaming may also involve the contractor/ subcontractor(s) for the effort. The goal of teaming is to work together to minimize workload redundancy, improve quality and cycle times, and ensure a fair and reasonable price.

15.2. Discussion. Teaming is useful throughout the acquisition process as it enables stakeholders to be dedicated to the procurement process and to work hand-in-hand with others thus minimizing the duplication of effort and maximizing efficiencies. Recent experience on one of NAVAIR's ACAT 1D sole source procurements has demonstrated the benefits of teaming to complete proposal analysis. Through teaming of the Government stakeholders with the contractor and subcontractors, DCAA's analysis of subcontractor proposals was able to commence prior to formal receipt of the contractor proposal, resulting in significant cycle time reductions. In general, when proposal analysis is conducted using teaming, details such as the extent of assistance required, the specific proposal areas for which assistance is needed, a realistic review schedule, and the information necessary to perform the review are discussed by the team members early in the planning phase. Frequent communication among the team is required throughout the process to enable issues to be identified and resolved without major impacts to the procurement schedule.

15.3. POC: The cognizant program procuring contracting officer (PCO) or AIR-2.1.1, Contract Policy Management Division, (301) 757-6596

CHAPTER XV: OTHER KEY TOPICS

PART B: ADVISORY AND ASSISTANCE SERVICES

15.4. Source Documentation:

OMB Circular Number A-11 (Aug 12), Section 83
DoD FMR 7000.14R Volume 2B (Chapter 19)
FAR Subpart 37.2
AIR-7.6 memo 7000 Ser AIR-7.6.2.1/290 of 9 Dec 99
AIR-10.0 memo 7000 Ser AIR-10.3CM/09-006 of 28 Apr 09

15.5. Definition. Advisory and Assistance Services (A&AS), previously referred to as Consulting Services, Contracted Advisory and Assistance Services, and Contractor Support Services, are 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. The products of A&AS may take the form of information, advice, opinions, alternatives, analyses, evaluations, recommendations, training, and technical support.

15.6. 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 the customer order). WCF activities are only responsible for A&AS associated with overhead (i.e., indirect) functions.

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

15.7.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.

15.7.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;
2) studies specifying the application of information technology and other information resources to support mission and objectives;
3) technology assessments and management and operations research studies in support of R&D objectives;
4) evaluations of foreign force and equipment capabilities, foreign threats, net assessments, and geopolitical subjects;
5) analyses of material, personnel, logistics, and management systems; and
6) environmental impact statements.

15.7.C. Engineering and Technical Services (ETS). Contractual services that take the form of advice, assistance, training, or hands-on training necessary to maintain and operate fielded weapon systems, equipment, and

components at design or required levels of effectiveness. 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.

15.8. 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 procured; 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.

15.9. POC: Cindy Meyer, AIR-10.3, (301) 757-7807 (Policy)
Debbie McCann, AIR-10.3, (301) 757-7801 (Policy/PB-15 Budget Exhibit)
Jenn Glass, AIR-10.3, (301) 757-7781 (PB-15 Budget Exhibit)

CHAPTER XV: OTHER KEY TOPICS

PART C: SMALL BUSINESS UTILIZATION POLICY AND PROCEDURES

15.10. Purpose:

15.10.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..., 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 targets.

15.10.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 Professionals make recommendations in accordance with agency procedures as to whether a particular acquisition should be awarded as a small business set-aside, as a Service-Disabled Veteran-Owned Small Business set-aside, as a Section 8(a) award, as a HUBZone set-aside, or as a Woman-Owned Small Business set-aside. Contracting activity Small Business Professionals perform this function by: 1) reviewing and making recommendations for all acquisitions over $3,000; 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).

15.10.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 $150,000 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.

15.11. Source Documentation and Guidance:

NAVAIRINST 4380.4 - Naval Air Systems Command Small Business Program
NAVAIR OSBP Community of Interest (COI) website at https://mynavair.navair.navy.mil/osbp
NAVAIRINST 4200.36E - Acquisition Plans
Contracts Competency Instruction (CCI) 4200.42C - Procedure for Review and Approval of Small Business Subcontracting Plans
NAVAIRINST 4200.37B - The Procurement Initiation Document Process
SECNAVINST 4380.8C - Implementation of the Department of the Navy Small Business Program
NAVAIR OSBP public website at http://www.navair.navy.mil/osbp/
Sources Sought Guidebook located on NAVAIR OSBP COI and PMC Web Tool
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)
Defense Federal Acquisition Supplement (DFARS)
Navy Marine Corps Acquisition Regulation (NMCARS)

15.12. Small Business Programs:

The Department of the Navy is required by statute to implement several basic small business programs: Small Business, Women-Owned Small Business (WOSB) Small Disadvantaged Business (SDB), Small Disadvantaged Business 8(a) Certified (8(a), Historically Underutilized Business Zone (HUBZone) Veteran-Owned Small Business (VOSB) Service-Disabled Veteran-Owned Small Business (SDVOSB). For more information, including a Fact Sheet on each category of small business, visit the NAVAIR OSBP COI.

A business concern may meet the requirements of multiple programs at the same time with the Navy receiving credit towards their small business targets under all applicable programs. Small Businesses must be located in the United States, organized for profit, including affiliates is independently owned & operated, not dominant in field of operations in which it is bidding on Government contracts, and meet the SBA's size standards included in the solicitation.

The size standard is based upon the North American Industrial Classification Standard (NAICS) assigned to the specific procurement and is dependent upon the product/service being purchased. The Contracting Officer determines the appropriate NAICS code and related small business size standard, in coordination with the requiring office, NAVAIR Small Business Deputy and the SBA PCR. The NAVAIR Small Business Deputy and SBA PCR should be involved in this discussion early in the acquisition process. The NAICS manual is available online at www.census.gov/epcd/www/naics.html.

15.13. NAVAIR Executive Small Business Council:

NAVAIR's Executive Small Business Council (ESBC), headed by the NAVAIR Commander, was established with a vision of enabling NAVAIR to provide the Warfighter with creative, affordable solutions brought to them through small business. The ESBC's mission is to ensure small businesses have the maximum practicable opportunity to participate in NAVAIR procurements, both as prime and subcontractors. The Council's objectives are:

1. Improve workforce awareness and initiate manager, supervisor and team lead accountability for NAVAIR small business contract participation.
2. Improve opportunities for small business participation as prime and subcontractors in NAVAIR contracts.
3. Institutionalize a culture that leverages and values small business participation in NAVAIR contract awards.
4. Provide guidance, resourcing and barrier removal for established teams (Performance Analysis, Process and Communication/Best Practices.

Each Competency and Program Executive Office (PEO) has a representative on the Council. In addition, there are opportunities to participate in special projects in support of the ESBC. Contact your Council representative or the NAVAIR OPSBP to learn more.

15.14. Small Business Goals/Targets:

Government wide small business goals are established each fiscal year by the President. Notwithstanding these government-wide goals, each procuring agency will have annual targets that represent the maximum practicable opportunity for small business participation as prime contractors. Each fiscal year, the NAVAIR OSBP negotiates small business targets with the Department of the Navy's OSBP. The NAVAIR OSBP Associate Director negotiates targets with NAVAIR's Business Units. NAVAIR's targets and performance data are available on the NAVAIR OSBP COI as well as the NAVAIR OSBP 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 small business functions, including providing periodic reports to the Commander/Commanding Officer on overall small business program implementation at the activity. They also assist and advise contracting and requiring office personnel, to include Program Executive Officers and Competency leadership on small business program-related regulatory, policy and directive requirements. The NAVAIR OSBP establishes processes and procedures for the Command's small business 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 small businesses are provided the maximum practicable opportunity within NAVAIR acquisitions.

15.15. Acquisition Planning:

15.15.A. Acquisition planners, to the maximum extent practicable, are required to structure contract requirements to facilitate competition by and among small business concerns as prime contractors, and avoid unnecessary and unjustified bundling that precludes small business participation as prime contractors (see NAVAIRINST 4200.36E, FAR 7.107 and 15 U.S.C. 631(j)). At NAVAIR, examination of potential breakout opportunities is especially important when developing acquisition plans. 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, Acquisition Strategies and Technology Development Strategies. The OSBP is also available to assist with Market Research as required by FAR Part 10. Website resources available to locate small businesses are at the NAVAIR OSBP public website and the NAVAIR OSBP COI website.

15.15.B. For Competitive Acquisitions that are not set-aside for small business, DFARS 215.304 requires the extent of participation of small businesses in performance of the contract be addressed in source selection. Your OSBP can assist you with the appropriate language, which will be tailored for individual procurements, for your Source Selection Plan and RFP.

15.15. C. The use of technologies developed under Small Business Innovative Research (SBIR) programs should be utilized to the maximum extent practicable, in order to leverage NAVAIR investment in these technologies and enable successful transition to production.

15.16. Market Research:

Market research is a process of collecting and analyzing information to gain insight concerning the capabilities within industry, to include small businesses, to satisfy requirements. Market research is important because sound fundamental market awareness often identifies new suppliers with different capabilities. New suppliers increase competition which lowers cost and improves program performance. Per FAR Part 10 market research must be conducted for each procurement. NAVAIR offers a course in market research that covers successful methods of market research. Contact your local training coordinator for more information. Additional information on market research, to include a Guidebook on Communication with Industry and a Sources Sought Guidebook, can be found on the NAVAIR OSBP COI.

15.17. 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. Set-asides are available for SB, WOSB, HUBZone and SDVOSB concerns. Regulatory coverage of small business set-asides is found at FAR Subpart 19.5.

15.18. Small Business Subcontracting Program:

15.18A. 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, visit the OSBP COI.

15.18.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 $650,000 (inclusive of options). The PCO is responsible for reviewing subcontracting plans as specified in FAR 19.705-4 Reviewing the Subcontracting Plan. The Subcontracting Plan must then be routed to the Defense Contract Management Agency, NAVAIR OSBP and the SBA PCR for their review and concurrence. Finally, the contract file must be documented to reflect the review and the PCO's final decision relative to an acceptable subcontracting plan.

15.18.C. NAVAIR CCI 4200.42C 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.

15.18.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.

15.18.E The requiring organization (Program Office or Competency) is responsible for monitoring the prime contractor's performance under the subcontracting plan incorporated into their contract. This ongoing evaluation should be used to determine reasonability of proposed goals on future similar contracts, and also to support the Contractor Performance Assessment Reporting System (CPARS) evaluation of Small Business Utilization. Guidance for this evaluation may be found on the NAVAIR OSBP COI.

15.19. 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. It will also reduce the risk of delays during Navy and OSD level Peer Reviews.

- Market Research (as required by FAR Part 10) must be conducted and documented in order to support the selected acquisition strategy. Too often this critical activity is not thorough enough, and as a result, competitions are reduced, acquisitions are delayed and the likelihood of protests increases. Market Research Training is available on the NAVAIR OSBP COI.

- Industry Days and Sources Sought Synopses are good tools 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. A Sources Sought Guidebook is available on the NAVAIR OSBP COI and the PMC Web Tool.

- The Small Business Coordination Record DD Form 2579 must be completed prior to synopsis of a requirement (NAVAIRINST 4380.4). Time is often wasted if an improper NAICS code is selected or if a competitive requirement is synopsized as full and open competition, and then determined to be set-aside for small business. Another synopsis would be required to correct these errors.

- The NAVAIR OSBP can provide advice on filling out the Small Business portion of the Contractor Performance Assessment Reporting System CPARS). There is also a useful training presentation on this topic located on the NAVAIR OSBP COI.

15.20. 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)

15.21. 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**)

15.22. 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.

15.23. Guidance

15.23.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 Plan (SEP), 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 addresses preparation of program unique specifications for NAVAIR programs.

15.23.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.

15.23.C. 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 no 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.

15.24. 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.

15.25. 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.

15.26. 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://mynavair.navair.navy.mil/pmcwebtool/.

15.27. 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)

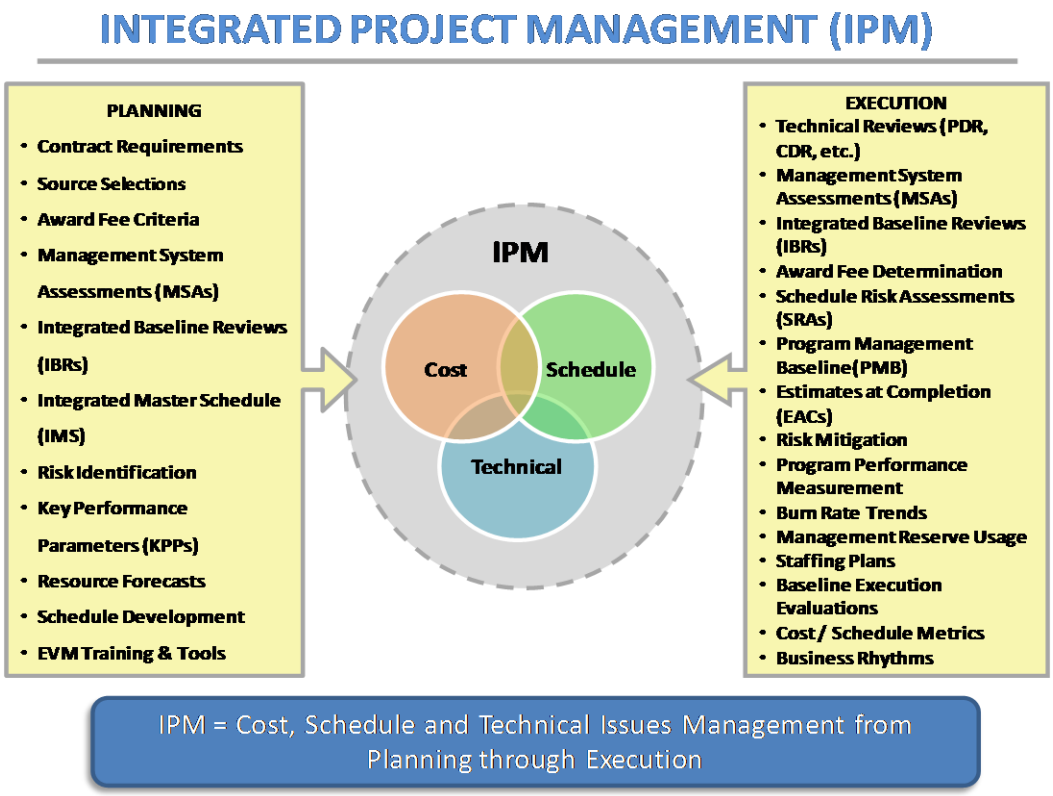
15.28. POC: Each respective PMA APMSE (Class Desk) or Competency designated subject expert

CHAPTER XV: OTHER KEY TOPICS

PART E: INTEGRATED PROJECT MANAGEMENT/EARNED VALUE MANAGEMENT

15.29. 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. An Estimating Technical Assurance Board (ETAB) process has been established to provide credible/defendable estimate inputs for Estimates at Completion (EACs) developed by NAVAIR. The determination of the need for an ETAB will be driven by the visibility and/or risk of the contract. Conducting an ETAB is also based on a joint decision between Program Executive Office (PEO) and AIR-4.2. It is recommended as a best practice to coordinate the completion of EACs in support of the budgetary cycle. Results from the EAC may impact funding decisions and this data is more useful prior to finalized budgets. On 20 February 2012, the NAVAIR Commander identified EVM as a mandatory best practice to improve affordability and speed to the fleet.

15.30. POC: Reginald A. Goodman, AIR-4.2.3, (301) 342-2455



CHAPTER XV: OTHER KEY TOPICS

PART F: ENVIRONMENT, SAFETY AND OCCUPATIONAL HEALTH ISSUES

15.31. Purpose. This section identifies NAVAIR expertise and resources available to support the integration of environment, 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.

15.32. Source Documents:

DoDI 5000.02, Operation of the Defense Acquisition System, of 8 Dec 08

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, DoD Ammunition and Explosives Safety Standards, of 5 Oct 04

SECNAVINST 5000.21, Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System, of 1 Sep 11

OPNAVINST 5090.1C, Environmental Readiness Program Manual, of 30 Oct 07

OPNAVINST 5100.23G, Navy Occupational Safety and Health Program Manual, of 30 Dec 05

NAVAIRINST 5090.2, Management and Elimination of Ozone Depleting Substances, of 13 Mar 08

NAVAIRINST 5090.3, Environmental Planning for NAVAIR Actions, of 18 Jun 07

CNO ltr 5090 Ser N45/8U156042, "Environmental Readiness in Systems Acquisition", of 29 Jul 08

Executive Orders (EOs) 12114, 12898, and 13423

42 U.S.C. 4321-4347, National Environmental Policy Act (NEPA) of 1969, as amended

NAVAIRINST 5000.21B Naval SYSCOM Risk Management Policy

15.33. 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. Department of Defense Instruction (DoDI) 5000.02 requires program managers to conduct a programmatic ESOH evaluation (PESHE) as part of the acquisition strategy to ensure that impacts are identified and mitigated. AIR-1.6 has developed a PESHE document authoring tool (PESHE DAT). This tool provides a standardized template and a tailored risk assessment module for programmatic and technical risks. The Risk Assessment Module allows the user to create risk assessments and mitigation measures for program Technical risks. Additional guidance can be obtained by contacting AIR-1.6The PESHE document 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, f) Explosive Safety, and g) Energy Compliance.

15.34. Resources

15.34.A The Environmental Programs Department (AIR-1.6) is dedicated to providing oversight for the environmental requirements and energy considerations associated with systems engineering lifecycle management, and ensuring that acquisition program managers understand and comply with environmental requirements identified in DoDI 5000.02, as well as the National Environmental Policy Act (NEPA).

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

15.34.C. The AIR-1.6 Environmental Programs Department is comprised of Headquarters and Navy Working Capital Fund (NWCF) staff members who:

- Develop and issue Command Policy, Procedures, and Guidance
- Review program environmental documentation (PESHE, NEPA, etc.) and certify compliance status at Milestones (B, C, and FRP)
- Attend and participate in Systems Engineering Technical Reviews (SETR), and make recommendations as appropriate on the associated ESOH components..

- Continuously track program environmental compliance status
- Provide and maintain a knowledge base of expertise to support Acquisition Program Managers' environmental requirements
- Provide environmental awareness training to acquisition personnel
- Provide environmental regulatory consultation and assistance to acquisition programs.
- 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, AS/AP, ORD, etc.)
- Provide pre-OTRR/OTRR reviews of environmental readiness and concurrence to proceed
- Identify and manage environmental business processes and resources to provide program managers maximum efficiency and Life Cycle Cost (LCC) savings
- Develop and maintain tools to support standardization of environmental documents to reduce risks and liabilities.

15.34.D. Environmental experts throughout the NAVAIR community (including the Naval Air Warfare Centers (NAWC) and the Fleet Readiness Centers (FRC)) assist AIR-1.6 personnel to ensure that a Program Manager's environmental risks are adequately addressed and mitigated to the maximum extent practicable 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 Policy 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 processes across the Command;
f) SETR event environmental compliance assessments

15.35. Policy & Programs

15.35.A. AIR-1.6 is responsible for promulgating DoD and SECNAV directives and instructions and issuing supportive environmental policies which impact NAVAIR acquisition programs. Policies are developed and coordinated with Program Executive Offices (PEOs) and/or NAVAIR acquisition staffs through the PEO Acquisition Code Meetings.

15.35.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 PESHE and NEPA. AIR 1.6 acts as liaison with the Chief of Naval Operations Environmental Readiness Division for adherence to the Navy's environmental policies and procedures.

15.36. AIR-1.6 Products and Services

15.36.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:

- 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 includes a Risk Assessment Module that will allow the user to create risk assessments by answering questions for Program Execution risks or by entering data for

associated Technical risks. PESHE DAT also serves as a knowledge base and repository of PESHE documents developed within the Tool.

- 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/National Stock Numbers (NSNs)
-technology insertion opportunities related to required specifications/NSNs
-cancelled, inactive specifications
- capture process changes
-prioritization of issues (ESA)

15.36.B. To ensure effective transition of environmental technology into the Fleet via NAVAIR's weapons system acquisition program management, AIR-1.6 utilizes Navy Environmental Sustainability Development to Integration (NESDI) funding for the following Environmental Enabling Capabilities (EECs):

- Range Sustainment (EEC-2). Innovations that address environmental impacts and restrictions at Navy ranges to ensure that naval training ranges and munitions testing/manufacturing ranges are fully available and efficiently utilized. Examples of projects in the local area include:
  - ✓ A study to assess the potential effects of lasers on marine life, and
  - ✓ Development of a comprehensive data set on toxicity of munitions constituents to regulatory acceptable marine species and the definition of their potential for bioaccumulation, cellular level impacts, and trophic transfer.
- Ship-to-shore Interface (EEC-4). Develop innovative techniques to manage ship hazardous material/waste offload to shore facilities. Examples of projects in the local area include:
  - ✓ An ongoing effort to select, procure, and integrate proven technologies that collect and concentrate solids and fine particles from dry dock floors, pumps, wells, cross connection channels, trenches, rail tracks, and adjacent areas to the dry dock.
  - ✓ An effort to demonstrate and integrate a low-cost, modular device that combines semi-autonomous motion with portable containment to maximize operator productivity while capturing the paint overspray before it can contaminate the dry dock.
- Weapon System Sustainment (EEC-3). Focus on the organizational- and intermediate-level Fleet maintainer to reduce the cost of compliance and increasing Fleet readiness. Example projects include:
  - ✓ Validating the use of alternative technologies (including corn hybrid polymer) for the effective repair of aircraft radomes, and
  - ✓ Demonstrating and validating the use of High Velocity Oxygen Fuel coatings as a replacement for hard chromium plating on helicopter dynamic components.
- Air and Port Operations (EEC-4). Addresses issues pertaining to air and port operations that ensure Fleet readiness. Example projects in the local area include: Validating a cathodic protection system to achieve effective corrosion prevention while reducing environmental impacts of caisson and floating dry dock ballast discharges, and
- Assessing the feasibility of coatings and other material advancements for permanent oil booms that mitigate biofouling accumulation and enhance compliance through increased reliability, extended life, and a reduced maintenance burden.
- Regulatory and Base Operations (EEC-5). Cost-effective methods for identifying, analyzing, and managing environmental constraints related to current and projected regulatory impacts. Example

projects include:

- Establishing guidelines and limitations for the use of biodiesel with ground tactical vehicles and equipment, and
- Quantifying Navy contaminant loads by demonstrating and validating contaminant source tracking technologies and developing a technical framework that enables water program managers to attribute existing contamination loads to support their compliance programs.

15.36.C. AIR-1.6 Program Services

Through the effective planning, management, tracking, and monitoring of environmental considerations, 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/energy compliance.

15.36.D. How to Acquire AIR-1.6 Products and Services

AIR-1.6 uses a rolling, 12-month calendar to track ESOH activities and compliance across the Command, including but not limited to Systems Engineering Test Reviews (SETR) and major test events. Acquisition programs can take a proactive role to realize efficiencies and minimize potential risk to cost and schedule through early engagement of AIR-1.6 representatives in the systems engineering process. Upon program initiation or significant restructure, preparation for milestone decision (B, C or FRP), major Engineering Change Proposal (ECP), or Block Upgrade, please contact the POC listed below to schedule an Initial Planning Meeting (IPM). The IPM will be used to establish an overall environmental strategy for your program, including but not limited to:

- Identification of current ESOH requirements and program goals
- Review of pertinent program documentation (e.g. Integrated Master Schedule, Test and Evaluation Master Plan (TEMP), flight test schedules, etc.)
- Evaluation of environmental staffing, tools, and other resources that may be needed

The IPM should result in an established program ESOH Plan of Action and Milestones (POA&M), outlining the timeline for development of requisite environmental documents (e.g., PESHE, NEPA compliance schedule), and energy considerations (e.g. eKPP, FBCE in the AoA, energy efficiency analysis within Probability of Program Success (PoPS) for Gate Reviews 1-6) as part of the overall program Integrated Master Schedule (IMS).

15.37. POC: Herman Varmall, Environmental Programs Department Head, AIR-1.6 (301) 757-2155

CHAPTER XV: OTHER KEY TOPICS

PART G: CORE LOGISTICS CAPABILITIES, TITLE 10 U.S. CODE, SECTION 2464

15.38. 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. There has been increased Congressional interest since 2006 in public depots and how the application of the core statute affects their continued presence. 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 partnering/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. The Strategic Planning Imperatives for Industrial Depot Maintenance (SPI/IDM) reinforces the need for early planning of industrial requirements prior to Milestone B by conducting a Core Logistics Analysis (CLA), simply defined as 'core' analysis herein, as mandated by the DoDI 5000.02.

15.39. Discussion

15.39.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.

15.39.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.

15.39.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 (JCS) (including establishment of an organic depot maintenance capability not later than four years after achieving Initial Operational Capability (IOC)).

15.39.D. To comply with statutory and DoDI 5000.02 requirements, a Core Logistics Analysis (CLA) is conducted prior to MS B. As design becomes stable and depot-level repairables become known, NAVAIR requires a final core analysis be conducted (NAVAIRINST 4790.34). To ensure core capability is efficiently and effectively utilized, depot-level core-sustaining workload is calculated per the DoDI 4151.20 to determine the depot-level workloads required to sustain the capability of those depot-level core requirements. The 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; and the computation that results in a quantity of core-sustaining workload in depot level hours.

15.39.E. Simply stated: Core is capability, not location; capability consists of the public 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.

15.39.F. It's important for acquisition program officials to consider the outcome of the Core Logistics Analysis and final core determination to ensure compliance with statutory requirements. The core or non-core determination can drive the maintenance support concept and follow-on budget exhibits. For these reasons, it's imperative that the Core Logistics Analysis be performed prior to MS B to preclude impediments to the program's progress later on. Additionally, the Core Logistics Analysis and final core determination is required as input to the Depot Maintenance Interservice (DMI) submission for Source of Repair Analysis SORA/ Depot Source of Repair (DSOR) decisions and included in the ILA and SETR checklists. Disregard for the Title 10 requirements could impact the approval to proceed to the next milestone.

15.40. POC: Ron Klasmeyer, AIR-6.7.7.2, (301) 757-8611 or ronald.klasmeyer@navy.mil

CHAPTER XV: OTHER KEY TOPICS

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

15.41. Background. In 1996, Congress enacted the Clinger-Cohen Act (CCA) Title 40 U.S.C, requiring agencies to use a disciplined capital planning and investment control process to acquire, use, maintain and dispose of information technology (IT). Per CCA, OSD Memo of 08 Mar 2002, DoDI 5000.02 of 8 Dec 2008, and SECNAVINST 5000.2E of 1 Sep 11, CCA compliance is required for all acquisition programs that contain Information Technology (IT), including National Security Systems (NSS) or IT in weapons and weapons systems programs. The law provides authority to the agency's Chief Information Officer (CIO) to manage IT resources effectively and the Navy CIO is delegated authority by the Department of Defense (DoD) CIO. The authority to grant confirmation of compliance with CCA and approve the Information Assurance Strategy (IAS) depends on the Acquisition Category (ACAT) as delineated in SECNAVINST 5000.2E. ACAT III and below acquisitions come under the delegated authority of the NAVAIR Command Information Officer. The NAVAIR Command Information Officer 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 programs designated Mission Critical/Mission Essential (MC/ME) IT in accordance with DoDI 5000.2 must be confirmed or certified by the cognizant CIO to be CCA compliant:
  - to achieve milestone
  - to release final Request for Proposals (RFP)
  - prior to contract award
  - before obligation of funds by registering programs in the DoD IT repository (DITPR-DON)
  - by having an approved formal Acquisition Information Assurance Strategy (AIAS)
- Acquisition programs that contain IT that are not MC/ME are designated Mission Support (MS) in accordance with Navy Information Assurance Manual SECNAV M-5239.1 must be confirmed or certified by the cognizant CIO to be CCA compliance:
  - to achieve milestone
  - to release final RFPs
  - prior to contract award
  - before obligation of funds by registering programs in the DoD IT repository (DITPR-DON)
  - are not required to have an approved formal AIAS
  - are advised to consider having an IAS
- NAVAIR acquisition of IT executed outside of the context of an acquisition program of record is evaluated and confirmed to be compliant with the CCA under the cognizance of the NAVAIR Command Information Officer using the IT approval Process.

15.42. 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
- Move the General Services Board of Contract Appeals authority to hear bid protests on IT contracts to the General Accounting Office (GAO)
- Ensure that capital IT investments are made for core/priority mission functions, need to be undertaken and are done after processes have been improved or system redesign has been accomplished or are part of system redesign
- 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

15.43. Risks. Risks associated with non-compliance include:

- Milestone Decision Authority (MDA) can refuse to grant a milestone or major decision for a program
- May result in negative findings during gate reviews

- Withholding or loss of funding
- May delay release of final RFP
- Loss or delay of contract award and/or schedule delays
- Potential Antideficiency Act violation

15.44. Key IT management actions

- Design and implement an IT management process for maximizing the value and assessing and managing the risks of 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. Prepare an annual report on progress in achieving the goals, to be included in the agency's budget submission to Congress
- 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 is a direct report to AIR-00)
- Inventory all computer equipment and maintain an inventory of any such equipment that is excess or surplus property

15.45. 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.

15.46. Application. The CCA applies to all federal executive agencies and all software-intensive domains. CCA applies to IT, systems containing IT, information systems and NSSs (refer to NIST SP 800-59 for the definition of NSSs), which are a peculiar kind of telecommunications or information system operated by the United States Government, the function, operation or use of which involves:

- Intelligence activities
- Cryptographic activities related to national security
- Command & Control of military forces
- Equipment that is an integral part of a weapon or weapon system
- is critical to the direct fulfillment of military or intelligence missions
- is protected at all times by procedures established for information that been specifically authorized under criteria established by an Executive order or an Act of Congress to be kept classified in the interest of national security.

15.47. To ensure CCA compliance requirements do not impact program schedules, it is vital that program planning include adequate CCA review and processing time. Programs should plan for no less than 32 business days for NAVAIR CIO review and approval, and an additional 90 calendar days for DON CIO and DASN C4I & Space 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 Act, Title 40 U.S.C. 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 Assurance Division, maintains 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 eleven elements of CCA are addressed and develops the Information Assurance Strategy. COE personnel also ensure that areas of DCIO responsibility are addressed. In compliance with the Appropriations Act, the COE staff enters the program's critical information in the Department of Defense (DoD) IT Portfolio Repository – Department of the Navy (DITPR-DON) database.

15.48. Responsibility for IT Oversight. Responsibility for Information Technology (IT) oversight is delineated in DoDI 5000.02, Operation of the Defense Acquisition System, Encl. 5 (IT Considerations), and SECNAVINST 5000.2E, Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System, Chapter 3 (IT Considerations).

15.49. NAVAIR Responsibility for IT Management, Approval, and Oversight of IT Acquisitions. NAVAIR office of Command Information Officer 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 Command Information Officer 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 2012, Deputy Department of the Navy Chief Information Officer for Navy (DDCIO(N)) released an automated, Web-based version of the IT Approval/ IT Spend Plan forms, called Navy Information Approval System (NAV-IDAS). NAVAIR (7.2) has been assigned as the Navy Program Manager for this tool. NAV-IDAS URL is https://navidas.navy.mil/. 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.

All questions related to the automated NAV-IDAS 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.*
- Evaluation and determination that Clinger Cohen compliance has been confirmed or certified in the context of a program of record. This may include IT procured separately from the primary contracting vehicles of the program of record or Embedded/platform IT. A finding of this sort satisfies the requirement for CCA compliance and exempts the proposed procurement from IT approval. The NAVAIR office of Command Information Officer will check for CCA perform evaluation of proposed IT procurements upon request and provide a determination.

15.49.A. Risks.

- Contracts will not process IT-related procurements without NAVAIR office of Command Information Officer 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.
- Noncompliance may result in Anti Deficiency Act violation.

15.49.B. Instruction for Obtaining IT Approval. The automated NAV-IDAS IT Approval/IT Spend Plan tool, including all supporting documentation and user information, is located on the NAV-IDAS Website: https://navidas.navy.mil/.

CHAPTER XV: OTHER KEY TOPICS

PART I: PERFORMANCE BASED SERVICE ACQUISITION (PBSA)

15.52. Source Documents:

Public Law 106-398, section 821
FAR 2.101, 37.102, 37.6, 7.105, 46.103, and 46.401(a)
Seven Steps to Performance Based Service Acquisition: https://www.acquisition.gov/comp/seven_steps/index.html
DFARS 237.170-2
NMCARS 5237.170-2(a)

15.53. Discussion

15.53.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. Therefore, acquisition regulations now require all non-performance based services acquisitions to be approved, delegated as follows: > $150K <$5M Chief of the Contracting Office; >$5M ≤ $85.5 AIR-2.0/A/B or 2.0 SES department head; >$ 85.5M DASN(AP).

15.53.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.

15.53.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.

15.53.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.

15.53.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).

15.53.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.

15.53.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 Course (CLC) Performance Based Services Acquisition (CLC 013). See. http://icatalog.dau.mil/onlinecatalog/ In addition, OFPP maintains the "Seven Steps to Performance Based

Services Acquisition" https://www.acquisition.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.

15.54. 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) 2

15.55. Background

Acquisition of services continues to be a special interest area for Congress, the GAO, and the DoDIG. In 2009,the Secretary of the Navy requested a review of MOPAS 2 thresholds to ensure that the Department is keeping a graded approach to managing risk. Pending results of this review, all services acquisitions between $100 and $250 million are designated ASN(RDA) Special Interest items subject to secretariat review under MOPAS 2 (Ref: DASN(AP) memo "Acquisition of Services" of 24 Nov 2009).

15.55A. Section 812 of the FY06 NDAA 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.

15.55B. OSD(AT&L) memo of 2 Oct 06 imposed on the military services this new congressional mandate, updating and superseding previous policy. DASN(ACQ) memo of 1 Dec 06 issued the DON Management and Oversight Process for the Acquisition of Services (Revised) (MOPAS 2). The DON MOPAS 2 retained the earlier 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 $150,000 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, since 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. If not included in program level documentation, a standalone MOPAS2 AS is required for every services acquisition exceeding $150,000. As of 24 Nov 2009, approval authority for MOPAS2 AS documents over $100M was elevated to the secretariat level when ASN(RDA) made services acquisition a RDA special interest item.

15.55C. SECNAVINST 5000.2E, Implementation and Operation of the Defense Acquisition System and the Joint Capabilities Integration and Development System, incorporated the DON MOPAS requirements into Chapter 7, Acquisition of Services.

15.55D. NAVAIRINST 4200.36E, Acquisition Plans, address planning requirements for services acquisitions. Acquisitions of services that are part of a weapons system acquisition program or automated information systems (AIS) managed in accordance with DoDI 5000.02 and SECNAVINST 5000.2E shall be reviewed and approved as part of that program management process. Acquisition of services tied to programs that are not managed in accordance with DoDI 5000.02 and SECNAVINST 5000.2E, or have achieved full operational capability or have not received previous milestone reviews are still subject to the requirements of USD(AT&L) memo of 2 Oct 06, Acquisition of Services, DASN (ACQ) memo of 1 Dec 06, Acquisition of Services, and NAVAIR MOPAS 2 of 17 May 07. Approval of acquisitions of services not managed in accordance with DoD 5000.02 and SECNAVINST 5000.2E shall be obtained by: 1) updating an existing AS; 2) combining an existing AP and AS; or 3) developing a new, stand-alone AS in accordance with MOPAS 2 requirements. The review and approval thresholds for these documents are stated in ASN(RDA) Acquisition Plan Guide, appendix A, section 8.11.a.3 as implemented by NAVAIR MOPAS 2 of 17 May 07 except as noted above for acquisitions over $100M.

15.56. 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 XV, 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 5000.02 from complying with the detailed requirements of the

MOPAS policy, but improved planning and oversight for the acquisition of services is a primary focus area of DoD efficiency objectives.

15.57. Discussion

15.57.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.

15.57.B. The approval requirements contained in the FY06 NDAA is 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.

15.58. 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

15.59. Source Documents:

DODD 5000.1
DoDI 5000.02
SECNAVINST 5000.2E
SECNAVINST 5420.188F
Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3170.01H, Joint Capabilities Integration and Development System, of 10 January 2012 Vice Chief of Naval Operations Memorandum 5420N09, Resources and Requirements Review Board (R3B) Charter of 25 July 2008
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

15.60. 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.

15.61. 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 Chief of Naval Operations (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.

15.62. 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 Material Development Decision (MDD), continues through the Materiel Solution Analysis 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 CAE except Gate 6 CPD chaired by CNO or CMC, 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 Engineering and Manufacturing Development (EMD) Phase. Follow-on Gate 6 reviews will occur during the pre- and post Milestone C, Full Rate Production (FRP) Decision Review (DR), Sustainment and annual sufficiency reviews. All Pass 2 Gates reviews will review program health for satisfactory cost, risks, and budget adequacy.

15.63. Responsibilities

All DON organizations shall ensure successful achievement of all DON Requirements/Acquisition Gates for all pre-MDAP, pre-MAIS, and all ACAT programs.

15.64. Source Guidance

Guidance on DON Requirements and Acquisition Process Improvements can be found in SECNAVNOTE 5000, dated 26 February 2008.

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

CHAPTER XV: OTHER KEY TOPICS

PART L: REVIEW FOR COMPLIANCE WITH ARMS CONTROL AGREEMENTS

15.70. Source Documents:

DoD Directive 5000.1 of 12 May 03

SECNAVINST 5000.2E of 1 Sep 11

DoD Directive 2060.1 of 9 Jan 01

SECNAVINST 5710.23C of 21 Sep 02

SECNAVINST 5420.188F of 2 Nov 05

15.71. Purpose All DoD activities shall be fully compliant with international arms control treaties, agreements and U.S. Government policies. Assistant Secretary of the Navy for Research, Development and Acquisition (ASN(RDA)) is responsible for Department of the Navy (DON) arms control compliance. Arms control compliance requirements, obligations and constraints shall be considered as an integral part of DON [NAVAIR] acquisition processes and operations.

15.72. Discussion

15. 72.A. DON Program Managers, Program Executive Offices, and operational commanders face increasing scrutiny, both at home and abroad, regarding the compliance of their programs with international arms control treaties and agreements. It is DON policy that all DON [NAVAIR] programs and activities be fully compliant with such treaties and agreements.

15. 72.B. A program may raise or appear to raise compliance concerns that could inadvertently waste valuable resources or even trigger a serious international incident if not properly addressed. Early identification of and response to arms control concerns is imperative to reduce programmatic risk.

15. 72.C. ASN(RDA) designated the Director, Strategic Systems Programs (DIRSSP) as the Executive Agent for all Navy and Marine Corps arms control compliance and implementation functions. Under DIRSSP, the Naval Treaty Implementation Program (NTIP), is responsible for administering these functions. All systems developed or acquired by DON [NAVAIR] shall be reviewed by the DIRSSP via NTIP, with the advice of Navy Office of General Counsel, to ensure compliance with arms control agreements. The Compliance Assessment Program (CAP) is a component of NTIP, providing direct assistance at no cost to Program Managers by identifying and effectively responding to any arms control compliance concerns.

15.72.D. CAP supports the DON [NAVAIR] Program Manager by:

- Providing arms control treaty expertise to identify and mitigate program risk.
- Conducting comprehensive arms control compliance assessments of DON programs and activities at every stage of the acquisition life cycle, from research, development and acquisition to deployment at no cost to the program office.
- Conducting these assessments using existing program technical documentation, whenever possible, to minimize the burden on the Program Manager.

15.73. More information can be found at the NTIP Web site http://www.ntip.navy.mil,or contact NTIP at: 1-888-867-5880 or (202) 433-6851.

CHAPTER XV: OTHER KEY TOPICS

PART M: JOINT DEPOT MAINTENANCE PROGRAM (JDM)/ DEPOT SOURCE OF REPAIR (DSOR), OPNAVINST 4790.14B

Background. The Joint Depot Maintenance (JDM) program began back in 1974 to focus on consolidating commonly used systems and equipment to eliminate unnecessary duplication of depot capability. As the program continued into the 1980's, the focus was redirected from review of postured workloads to review of new acquisitions to achieve efficient and effective use of depot capability. The benefits of the DSOR/DMI process are a solid and auditable process for DSOR Decisions, potential to minimize the unnecessary duplication of depot capability, and the potential to substantially reduce costs associated with depot stand-up.

Purpose. The Department of Defense (DoD) policy requires the program managers use the most effective sources of support for depot maintenance, organic or commercial, consistent with statutory and regulatory requirements and required military capability. These goals can be obtained through the Depot Source of Repair (DSOR) decision process.

15.74. Discussion

15.74A. The governing directive for the JDM Program is OPNAVINST 4790.14B Joint Depot Maintenance Program. This instruction establishes policy and procedures for implementing the JDM Program and DMI process uniformly in the Department of the Navy and in accordance with applicable policies of DODD 4151.18, Maintenance of Military Materiel and DODI 5000.02, Operation of the Defense Acquisition System for the Navy.

15.74B. The DSOR decision process is a mandatory activity in logistics support planning for systems and equipment that will require depot maintenance. The DSOR decision process can and shall be initiated after a Core Determination has been rendered in accordance with Title 10 USC 2464.

15.74C. The DSOR decision process is in compliance with DoDD 4151.18 by requiring all weapon systems, end items, systems, subsystems, equipment, or components with depot maintenance requirements, as defined by section 2460 of Title 10, United States Code. Excluded from this process are hull, mechanical and electrical (HM&E) programs for ships and submarines. The requirement of OPNAVINST 4790.14B are applicable regardless of core determination and will apply the planned depot maintenance meets any of the following criteria:

a) New acquisitions, including modifications to existing items, regardless of the investment required.
b) Existing depot repair programs planned for transition from contract to organic support, organic to contract support, or from organic to organic support, regardless of the investment required or the value of the program.
c) Existing inter-Service depot repair program relationships planned for termination, regardless of reason, investment and cost required, or the value of the program.
d) Existing depot repair programs for which a planned expansion of capability requires an additional capital expenditure of $1.5 million or more.
e) Existing depot repair programs planned for relocation (organic to organic), if the associated total expenditure required is $1.5 million or more.
f) Hull, Mechanical, and Electrical (HM&E) programs for ships and submarines are excluded from this process; however, shipboard electronics and ordnance are not.
g) Programs with depot-level repairable (DLR) that go through a base realignment and closure (BRAC), or are moved by higher level direction will submit the DMI candidate information template to the Navy MISMO to maintain appropriate record keeping.

15.75. Commitment of funds leading to the establishment of a depot- capability shall not be made prior to the joint Service DSOR assignment decision in accordance with OPNAVINST 4790.14B.

15.76. POC: Dennis Steiger, AIR-6.7.7.1, (301) 866-2449 or dennis.steiger@navy.mil.

LIST OF ABBREVIATIONS AND ACRONYMS

3D	Deactivation, Demilitarization and Disposal
A&AS	Advisory and Assistance Services
ACAT	Acquisition Category
ACC	Acquisition Community Connection
ACO	Administrative Contracting Officer
ADM	Acquisition Decision Memorandum
AKSS	Acquisition Knowledge Sharing System
ALH	Acquisition Logistics Handbook
ALSP	Acquisition Logistics Support Plan
AM	Acquisition Manager
AMPS	Afloat Master Planning System
A_o	Operational Availability
AoA	Analysis of Alternatives
A_m	Materiel Availability
AP	Acquisition Plan
AAP	Abbreviated Acquisition Program
AMPS	Afloat Master Planning System
ANSI	American National Standards Institute
APB	Acquisition Program Baseline
APEO	Assistant Program Executive Officer
APEO (E)	Assistant Program Executive Officer (Engineering)
APEO(L)	Assistant Program Executive Officer (Logistics)
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
AS	Acquisition Strategy
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) CHENG	Assistant Secretary of the Navy (Research, Development & Acquisition) Chief Engineer
ASPRO	Acquisition Systems Protection Officer
ASR	Acquisition Strategy Report
ASSIST	Acquisition Streamlining & Standardization Information System
ASW	Anti-Surveillance Warfare
ATC	Air Traffic Control
AT&L	Acquisition, Technology and Logistics
ATWAP	Acquisition Workforce Tuition Assistance Program
BCA	Business Case Analyses
BCP	Budget Change Proposal
BES	Budget Estimate Submission
BF	Battle Force
BFI	Battle Force Interoperability
BFIT	Battle Force Interoperability Test
BOA	Basic Ordering Agreement
BPA	Blanket Purchase Agreement
BRAC	Base Relocation & Closure
BRB	Baseline Review Board
CAE	Component Acquisition Executive (same as SAE)
CAC	Common Access Card
CAO	Competency Aligned Organization
CAP	Compliance Assessment Program

CAPS & LIMS	Capabilities and Limitations
CARD	Cost Analysis Requirements Description
CARS	Consolidated Acquisition Reporting System
CASREP	Casualty Report
CASS	Consolidated Automated Support System
CBT	Computer Based Training
CCA	Clinger-Cohen Act
CCB	Change Control Board or Configuration Control Board
CCBU	Council of Competencies and Business Units
CCR	Central Contractor Registration
CC/S/A	Combat Command/Staffs/Agencies
CD	Compact Disk
CDD	Capability Development Document
CDR	Critical Design Review
CDRL	Contract Data Requirements List
CE	Concept Exploration
CFE	Contractor Furnished Equipment
CFFC	Commander, Fleet Forces Command
CHSENG	Chief Systems Engineer
CI	Configuration Items
CI	Counterintelligence
CIEL	Common Information Element List
CIO	Chief Information Officer
CICA	Competition in Contracting Act
CJCS	Chairman of the Joint Chiefs of Staff
CJCSI	Chairman of the Joint Chiefs of Staff Instruction
CJCSM	Chairman of the Joint Chiefs of Staff Manual
CL	Continuous Learning
CLA	Core Logistics Analysis
CLC	Continuous Learning Courses
CLIN	Contract Line Item Number
CM	Configuration Management
CMC	Commandant of the Marine Corps
CMP	Configuration Management Plan
CNAF	Commander, Naval Air Forces
CNATRA	Chief of Naval Air Training
CNO	Chief of Naval Operations
COAL	Common Operational Activities List
COE	Center of Excellence
COI	Communities of Interest
COMOPTEVFOR	Commander, Operational Test and Evaluation Force
COMNAVRESFOR	Commander, Naval Reserve Forces
CONL	Common Operation Node List
CONOPS	Concept of Operations
COTS	Commercial-Off-The-Shelf
CPARS	Contractor Performance Assessment Reporting System
CPEO	Council of Program Executive Officers
CPD	Capability Production Document (formerly part of Operational Requirements Document (ORD))
CLF	Commander in Chief, Atlantic Fleet
CPF	Commander-in-Chief, U.S. Pacific Fleet
CPI	Critical Program Information
CRM	Cross Reference Matrix
CS	Consulting Services Computer Software
CSA	Configuration Status Accounting
CSB	Configuration Steering Board
CSG	Carrier Strike Group

CSI/CIM	Critical Safety Item and Critical Item Management
CSIT	Combat System Interoperability Test
CSFL	Common Systems Function List
CSL	Common System List
CSNL	Common System Node List
CSTAR	Capstone System Threat Assessment Report
CTE	Critical Technology Elements
CUI	Controlled Unclassified Information
CWP	Contractor Work Plan
CY	Calendar Year
C4I	Command, Control, Communications, Computers, and Intelligence
C4ISR	C4I Support and Reconnaissance
C5I	Command, Control, Communications, Computers, Ships Combat System and Intelligence
C5IMP	Command, Control, Communications, Computers, Ships Combat System and Intelligence Moderization Plan
D	Depot
DAB	Defense Acquisition Board
DAE	Defense Acquisition Executive
DAG	Defense Acquisition Guide
DAMIR	Defense Acquisition Management Information Retrieval
DAP	Defense Acquisition Portal
DASD(MR)	Deputy Assistant Secretary of Defense (Materiel Readiness)
DASN	Deputy Assistant Secretary of the Navy
DASN(ACQ)	Deputy Assistant Secretary for Acquisition Management
DASN(AP)	Deputy Assistant Secretary of the Navy (Acquisition & Procurement)
DAU	Defense Acquisition University
DAWIA	Defense Acquisition Workforce Improvement Act
DCAA	Defense Contract Audit Agency
DCMA	Defense Contracts Management Agency
DCNO	Deputy Chief of Naval Operations
DDA	Designated Disclosure Authority
DEP	Distributed Engineering Board
DER	Data Exchange Requirement
D&F	Determination and Finding
DFARS	Defense Federal Acquisition Regulation Supplement
DGSIT	Deploying Group System Integration Test
DIACAP	DoD Information Assurance Certification and Accreditation Process
DID	Data Item Description
DISA	Defense Information System Agency
DITPR-DON	Department of Defense Information Technology Portfolio Repository-Department of the Navy
DITSCAP	Department of Defense Information Technology Security Certification and Accreditation Process (DIACAP replaced the former process, known as DITSCAP)
DLA	Defense Logistics Agancy
DMI	Depot Maintenance Interservice
DMR	Defense Management Report
DNET	Defense Network
DoD	Department of Defense
DoDAF	Department of Defense Architecture Framework
DoDD	Department of Defense Directive
DoDI	Department of Defense Instruction
DoDIG	Department of Defense Office of Inspector General
DOL	Director of Logistics
DON	Department of the Navy
DOORS	Data Object Oriented Repository System
DOT&E	Director, Operational Test & Evaluation
DPAP	Defense Procurement and Acquisition Policy
DPPG	Defense Program and Planning Guidance
DR	Decision Review

DRB	Defense Resources Board/Design Review Board
DRPM	Direct Reporting Program Manager
DRRA	Data Rights Requirements Analysis
DRRB	Data Requirements Review Board
DSOR	Depot Source of Repair
DT	Developmental Testing
DT&E	Development Test & Evaluation
EA	Economy Act
EAC	Estimates at Completion
EACB	Enterprise Architecture Coordination Board
ECCB	Electronic Configuration Control Board
ECP	Engineering Change Proposal
EDT	Externally Directed Teams
eDACM	Electronic Defense Acquisition Career Manager
EEC	Environmental Enabling Capabilities
EEC2	Range Sustainment
EEC3	Weapon System Sustainment
EEC4	Ship-to-shore Interface; Air and Port Operations
EEC5	Regulatory and Base Operations
EIA	Electronic Industries Alliance
EMD	Engineering & Manufacturing Development (also E&MD)
EMI	Electromagnetic Interference
EO	Executive Order
EOB	Expense Operating Budget
ERP	Enterprise Resource Planning
ESA	Environmental System Allocation
ESG	Expeditionary Strike Group
ESH	Environmental Safety, Health
ESOH	Environmental Safety and Occupational Health
ESR	Executive Strategy Review
ET	Enterprise Team
ETAB	Estimating Technical Assurance Board
ETS	Engineering and Technical Services
EVM	Earned Value Management
EVMS	Earned Value Management System
FAQ	Frequently Asked Questions
FAR	Federal Acquisition Regulations
FC	Flight Clearance
FCRR	Final Certification Readiness Review
FDNF	Forward Deployed Naval Forces
FedBizOPs	Federal Business Opportunities.
FLTCOM	Fleet Commander
FMB	Financial Management and Budget
FMS	Foreign Military Sales
FOCSR	Full Operational Capability Supportability Review
FOM	Figure of Merit
FORCEnet	US Navy Enterprise Network
FRC	Fleet Readiness Center
FRP	Full Rate Production
FST	Fleet Support Team
FY	Fiscal Year
FYDP	Future Year Defense Program
F3I	Form, Fit, Function Interface
GAO	General Accounting Office
GENSER	General Service
GFE	Government Furnished Equipment
GFI	Government Furnished Information
GFP	Government Furnished Property

GSA	Government Services Administration
GSE	Ground Support Equipment
HAT	Hazardous Material Authorized Use List Analysis Tool
HBCU/MI	Historically Black College and University/Minority Institutions
HM	Hazardous Materials
HMAUL	Hazardous Material Authorized Use List
HM&E	Hull, Mechanical and Electrical
HQMC	Headquarters Marine Corps
HSI	Human-System Integration
HUBZone	Historically Underutilized Business Zone
HW	Hazardous Waste
HWIL	Hardware in the Loop
I	Intermediate
IA	Information Assurance
IAS	Information Assurance Strategy
IAW	In Accordance With
IBR	Integrated Baseline Review
ICD	Initial Capabilities Document (formerly Mission Need Statement (MNS))
ICE	Independent Cost Estimate
ICRR	Initial Certification Readiness Review
IDIQ	Indefinate Delivery & Indefinate Quantity
IEEE/EIA	Electrical and Electronic Engineers/Electronic Industries Alliance
IER	Information Exchange Requirement
IFF	Identification Friend or Foe
IIWG	Integration and Interoperability Working Group
I&L	Installation and Logistics
ILA	Independent Logistics Assessment
ILS	Integrated Logistics Support
IMP	Integrated Master Plan
IMS	Integrated Master Schedule
IOC	Initial Operating Capability
IOCSR	Initial Operating Capability Supportability Review
IP	Intellectual Property
IPCD	Initial Platform Certification Decision
IPM	Initial Planning Meeting
IPPD	Integrated Product and Process Development
IPR	Interdepartmental Purchase Request
IPT	Integrated Program Team/Integrated Product Team
IPTL	Integrated Program Team Lead/Integrated Product Team Lead
IPS	Integrated Program Schedule
IPS	Integrated Logsitics Support
IRM	Information Resource Management
ISP	Information Support Plan
IT	Information Technology
IWP	Individual Work Plans
J&A	Justification & Approval
JCD	Joint Capabilities Document
JCIDS	Joint Capabilities Integration & Development System
JCPAT-E	Joint C4I Program Assessment Tool - Empowered
JCS	Joint Chiefs of Staff
JDM	Joint Depot Maintenance
JITC	Joint Interoperability Test Command
JPD	Joint Planning Document
JPG	Joint Planning Guidance
JROC	Joint Requirements Oversight Council
KM/DS	Knowledge Management/Decision Support
KMS	Knowledge Mangement System
KPP	Key Performance Parameters

KSA	Key System Attribute
	Key Support Areas
LA	Logistics Assessment
LAN	Local Area Network
LCC	Life Cycle Cost
LCCE	Life Cycle Cost Estimate
LCCSP	Life Cycle Sustainment Plan
LEM	Logistics Element Manager
LICN	Local Iem Control Number
LMI	Logistics Management Information
LM	Logistics Manager
LOA	Line of Accounting
LRB	Legal Review Board
LRFS	Logistics Requirements Funding Summary
LRIP	Low Rate Initial Production
LSA	Logisitics Support Analysis
M&S	Modeling & Simulation
MAIS	Major Automated Information System
MARCORSYSCOM	Marine Corps Systems Command
MC/ME	Mission Critical/Mission Essential
MCOTEA	Marine Corps Operational Test & Evaluation Agency
MDA	Milestone Decision Authority
MDD	Material Development Decision
MDAPS	Major Defense Acquisition Program
ME	Manufacturing Engineering
MEU	Marine Expeditionary Unit
MGFEL	Master Government Furnished Equipment List
MID	Management Initiative Decision
MILSTRIP	Military Standard Requisitioning and Issue Procedures
MIPR	Military Interdepartmental Purchase Request
MIWRG	Mine Warfare Readiness Group
MNS	Mission Need Statement
MOA/U	Memorandum of Agreement/Understanding
MOPAS	Management and Oversight Process for the Acquisition of Services
MRL/MRA	Manufacturing Readiness Level and Assessments
MROC	Marine Requirements Oversight Council
MS	Milestone
	Mission Support
MSA	Management System Assessment
MSS	Management and Professional Support Services
MW	Modernization Window
NAICS	North American Industrial Classification Standard
NAMP	Naval Aviation Maintenance Procedure
NAVAIR	Naval Air Systems Command
NAVAIRHQ	Naval Air System Command Headquarters
NAVAIRINST	Naval Air Systems Command Instruction
NAVAIRSYSCOM	Naval Air Systems Command
NAVCOMPT	NAVAIR Comptroller
NAVICP	Naval Inventory Control Point
NAVSEA	Naval Sea Systems Command
NAVSUP	Naval Supply Systems Command
NAWC	Naval Air Warfare Center
NAWCAD	Naval Air Warfare Center Aircraft Division
NAWCWD	Naval Air Warfare Center Weapons Division
NCEE	Naval Collaborative Engineering Environment
NCMC	Naval Networks and FORCEnet C5I Modernization Conference
NCTSI	Navy Center for Tactical Systems Interoperability
NCW	Network Centric Warfare

NDAA	National Defense Authorization Act
NDE-NM	Navy Data Management-Navy Moderization
NDI	Non-Developmental Item
NEPA	National Environmental Policy Act
NETWARCOM	Naval Network Warfare Command
NFHP	Navy Flying Hour Program
NKO	Navy Knowledge Online
NICN	National Identification Control Number
NIIN	National Item Identification Number
NIPRNET	Unclassified but Sensitive Internet Protocol Router Network
NMCARS	Navy Marine Corps Acquisition Regulation Supplement
NMCI	Navy-Marine Corps Intranet
NMS	National Military Strategy
NNFE	Naval Network and ForceNet Enterprise
NR	Non-Recurring
NR-KPP	Net-Ready Key Performance Parameter
NSERC	Naval Systems Engineering Resource Center
NSN	National Stock Number
NSS	National Security Systems
NTIP	Naval Treaty Implementation Program
NWCF	Navy Working Capital Fund
O	Organizational
OAG	Operational Advisory Group
OAR	Open Air Range
OASD	Office of the Assistant Secretary of Defense
OASD(A&I)	Office of the Assistant Secretary of Defense (Architecture and Interoperability)
OASD(NII)	Office of the Assistant Secretary of Defense (Network and Information Integration)
OASD(RD&A)	Office of the Assistant Secretary of Defense (Research, Development & Acquisition)
OCSR	Organizational Computer Security Representative
ODS	Ozone Depleting Substance
OEM	Original Equipment Manufacturer
OFPP	Office of Federal Procurement Policy
O&MN	Operations & Maintenance Navy (appropriation) (O&MNR is O&M for the Naval Reserve)
OMB	Office of Management and Budget
OPN	Other Procurement, Navy
OPNAV	Office of the Chief of Naval Operations
OPR	Office of Primary Responsibility
OPSEC	Operation Security
OR	Operational Requirement
ORD	Operational Requirements Document
OSBP	Office of Small Business Programs
OSD	Office of the Secretary of Defense
OSIP	Operational Safety Improvement Program
O&S	Operational and Support
OT	Operational Testing
OTA	Operational Test Agency
OT&E	Operational Test & Evaluation
OTRR	Operational Test Readiness Review
OV	Operational View
PACMEF	Pacific Fleet Middle East Force
PB	Presidential Budget
PBA	Performance Based Agreement
PBCLS	Performance Based contractor logistics support
PBD	Program Budget Decision
PBL	Product Baseline Performance Based Logistics
PBSA	Performance Based Service Acquisition
PANMC	Procurement of Ammo, Navy and Marine Corps

PCA	Physical Configuration Audit
PCD	Platform Certification Decision
PCO	Procurement Contracting Officer
PCP	Program Change Proposal
PCR	Procurement Center Representative
PDM	Program Decision Meeting
PDM	Program Decision Memorandum
PDR	Preliminary Design Review
PDF	Portable Document Format
PEO	Program Executive Officer
PEO(A)	Program Executive Officer Assualt and Special Mission
PEO(T)	Program Executive Officer Tactical Aircraft Programs
PEO(U&W)	Program Executive Officer Unmanned Aviation and Strike Weapons
PEO(JSF)	Program Executive Officer Joint Strike Fighter
PESHE	Programmatic Environmental, Safety, and Occupational Health Evaluation
PESHE DAT	PESHE Document Authoring Tool
PFCP	Program Funding Change Proposal
PGI	Procedures, Guidance and Information
PHST	Packaging, Handling, Storage, and Transportation
PID	Procurement Initiation Document
PM	Program Manager
PMA	Program Manager, Air
PMB	Performance Measurement Baseline
PMC	Program Management Community
PMS	Program Manager Ship
PMT	Procurment Management Tool
PN	Procurement Number
PO	Project Order
POA&M	Plan of Actions & Milestones
POC	Points of Contact
POM	Program Objectives Memorandum
POPL	Program Office Protection Lead
PoPs	Probability of Program Success
PPA	Procurement Planning Agreement
PPBE	Planning, Programming & Budgeting and Execution
PPBS	Planning, Programming, and Budgeting System
PPIP	Program Protection Implementation Plan
PPC	Procurement Planning Conference
PPL	Preferred Product List
PPP	Program Protection Plan
PR	Procurement Request
	Program Review
PSI	Product Support Integrator
PSM	Process Safety Manager
PSP	Product Support Provider
PST	Product Support Team
PT	Procurement Team
P2	Pollution Prevention
QA	Quality Assurance
QASP	Quality Assurance Surveillance Plan
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
RDA	Research Development and Acquisition
RDC	Rapid Deployment Capability

RDT&E	Research, Development, Test & Evaluation
RDT&E,N	Research, Development, Test & Evaluation Navy (appropriation)
RFD	Request for Minor & Major Deviation
RFI	Request for Information
RFM	Requiring Financial Manager
RFP	Request for Proposal
RM	Requiring Manager
RM	Risk Management
RMB	Risk Management Board
RMP	Risk Management Plan
RMD	Resource Management Decision
R&M	Reliability and Maintainability
ROM	Rough Order of Magnitude
ROR	Repair of Repairables
RSS	Really Simple Syndication
R3B	Requirements Resources Review Board
SA	Supportability Analysis
SAE	Service Acquisition Executive
SAMP	Single Acquisition Management Plan
SAS	Supportability Analysis Summaries
SB	Small Business
SBA	Small Business Administration
SBIR	Small Business Incentive Research
SCD	Ship Change Document
SCM	Supply Chain Management
SD&D	System Development & Demonstration
SDREN	Secret Defense Research and Engineering Network
SDVOSB	Service Disabled Veteran Owned Small Business
SE	Systems Engineering
SECNAV	Secretary of the Navy
SECNAVINST	Secretary of the Navy Instruction
SEI	Software Engineering Institute
SEMP	System Engineering Mangement Plan
SEP	Systems Engineering Plan
SERC	System Engineering Resource Center
SES	Senior Executive Service
SETR	System Engineering Technical Review
SHIPALT	Ship Alterations
SID	Ship Installation Drawing
SIPRNET	Secure Internet Protocol Network
SIS	Software Intensive System
SME	Subject Matter Expert
SOF	Statement of Functionality
SOO	Statement of Objectives
SORA	Source of Repair Analysis
SOVT	System Operational Verification Testing
SOW	Statement of Work
SPAWARSYSCOM	Space and Naval Warfare Systems Command
SPG	Strategic Planning Guidance
SPI/IDM	Strategic Planning Imperatives for Industrial Depot Maintenance
SPP	Sponsor Program Proposal
SPS	Standard Procurement System
SQL	Structured Query Language
SQT&E	Software Qualification Test & Evaluation
SRA	Scheduled Risk Assessment
SRR	Systems Requirements Review
SSA	Source Selection Authority
SSAC	Source Selection Advisory Council

SSEB	Source Selection Evaluation Board
SSIL	System/Subsystem Interface List
SSO	Source Selection Office
SSP	Source Selection Plan
SV	Systems &Services View
SWP	Standard Work Package
SYSCOM	Systems Command
TAA	Team Assignment Agreement
TADIL	Tactical Data Link
TCD	Target Configuration Date
TD	Technical Directive Technology Development
TDP	Technical Data Package Technology Development Phase
TDS	Technology Development Strategy
T&E	Test and Evaluation
TEIN	Test and Evaluation Identification Number
TEMP	Test and Evaluation Master Plan
TISP	Tailored Information Support Plan
TLCM	Total Life Cycle Management
TR	Trouble Report
TYCOMs	Type Commanders (Commander in Chief, U.S. Atlantic Fleet; Commander in Chief, U.S. Pacific Fleet; and Commander in Chief, U.S. Naval Forces, Europe)
USD(AT&L)	Under Secretary of Defense (Acquisition, Technology, & Logistics)
USMC	United States Marine Corps
VE	Value Engineering
VECP	Value Engineering Change Proposal
VOSB	Veteran Owned Small Business
WBS	Work Breakdown Structure
WCF	Working Capital Fund
WIPT	Working Integrated Product Team Working-level Integrated Product Team
WOSB	Woman-Owned Small Business
WPN	Weapons Procurement, Navy
WR	Work Request
WSESRB	Weapons System Explosive Review Board
WSI2T	Weapons System Integration and Interoperability Testing