Defense Acquisition Guidebook

Chapter 10 - Decisions, Assessments, and Periodic Reporting

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DEFENSE ACQUISITION GUIDEBOOK
Chapter 10 - Decisions, Assessments, and Periodic Reporting

10.0. Overview

10.0.1. Purpose

This Chapter discusses major program decisions, executive-level decision forums, program assessments, and periodic reporting. Generically, it prepares the Program Manager and Milestone Decision Authority to execute their respective oversight responsibilities.

10.0.2. Contents

The chapter starts with overviews of the major decision points and executive-level review forums associated with a program. It also discusses Integrated Product Teams (IPTs) . Other topics include Exit Criteria , Independent Assessments , Information Sharing and Department of Defense (DoD) Oversight , Management Control , Program Plans , and Periodic Reports for Major Acquisition Programs and Major Automated Information Systems programs. The chapter also includes an overview of the Defense Acquisition Management Information Retrieval System and a discussion of Special Interest Programs . The chapter closes with discussions of Should-Cost and Acquisition Program Transition Workshops .

10.1. Decision Points

10.1.1. Types of Decision Points

There are two types of decision points for Major Defense Acquisition Programs and Major Automated Information Systems: milestone decisions and other decision review points. Each such point results in a decision to initiate, continue, advance, change direction in, or terminate a project or program work effort or phase. The type and number of decision points may be tailored to program needs. The Milestone Decision Authority approves the program structure, including the type and number of decision points, as part of the program (technology development or acquisition) strategy .

Major decision points (including milestone decisions) authorize entry into the major acquisition process phases:

- Material Development Decision -- entry into Materiel Solution Analysis ;
- Milestone (MS) A entry into Technology Development ;
- Pre-EMD Review
- Milestone B entry into Engineering and Manufacturing Development ;
- Milestone C entry into Production & Deployment (Low Rate Initial Production (LRIP) for Major Defense Acquisition Programs and Major Programs, Production or Procurement for non-major programs that do not require LRIP, or Limited Deployment for operational testing for Major Automated Information Systems or software with no production components); and
- Full Rate Production or Full Deployment.

The statutory and regulatory information requirements specified in DoD Instruction 5000.02 support these major decision points.

10.1.1.1. Defense Business System (DBS) Decision Points

The BCL acquisition business model described in DTM-11-009, 12/09/2011 and described in Chapter 12 governs the decision process for DBSs. Although the major milestones have the same names as those in the standard defense acquisition decision framework, the phases are different:

- Material Development Decision -- entry into Investment Management;
- Milestone (MS) A entry into Prototyping;
- Authorization to Proceed
- Pre-Engineering Development
- Milestone B entry into Engineering Development ;
- Milestone C entry into Limited Fielding; and
- Full Deployment.

Additionally, the principles of BCL can be applied at the increment and at the release level. (There may be multiple releases within an increment.) Multiple increments may also be approved concurrently if they have well defined and approved requirements, are fully funded, and have appropriate entrance and exit criteria. For Increment two (2) and beyond, the Milestone Decision Authority must grant Authorization to Proceed (ATP) and document it in an Acquisition Decision Memorandum (ADM). ATP serves as the initiation of the 5-year period for time-certain delivery of capability to ensure compliance with section 2445(c) of title 10, United States Code .

10.1.1.2. Decision Reviews

Decision reviews assess progress and authorize (or halt) further program activity. The review process associated with each decision point typically addresses the program affordability and cost effectiveness; program progress, risk, and trade-offs; strategy, including maintaining competition and the business arrangement (contract type and incentive structure), program funding, and the development of exit criteria for the next phase or effort.

The regulatory information required to support both milestone decision points and other decision reviews should be tailored to support the review, but must be consistent with the requirements

specified in DoD Instruction 5000.02 .

10.1.2. Decision Point Certifications

The Milestone Decision Authority for an MDAP signs a certification memorandum for record prior to Milestone A and Milestone B as specified in sections 2366a and 2366b of title 10, United States Code.

10.1.2.1 Milestone A Certification Requirements

A major defense acquisition program may not receive Milestone A approval until the Milestone Decision Authority certifies, after consultation with the Joint Requirements Oversight Council on matters related to program requirements and military needs, to the following, without modification, from 10 USC 2366a , as amended by Public law 111-23, "Weapon Systems Acquisition Reform Act of 2009" , and the FY 2012 NDAA :

1. that the program fulfills an approved initial capabilities document;
2. that the program is being executed by an entity with a relevant function as identified by the Secretary of Defense;
3. that a determination of applicability of core depot-level maintenance and repair capability has been made;
4. that an analysis of alternatives has been performed consistent with the study guidance developed by the Director of Cost Assessment and Program Evaluation;
5. a cost estimate for the program has been submitted, with the concurrence of the Director, Cost Assessment and Program Evaluation, and the level of resources required to develop, procure, and sustain the program is consistent with the priority level assigned by the Joint Requirements Oversight Council; and
6. *[only include if the system duplicates a capability already provided by an existing system]* the duplication provided by this system and (name of existing system) program is necessary to appropriate.

See Figure 10.1.2.1.F1 for a sample Milestone A certification memorandum.

Figure 10.1.2.1.F1. Sample Required Statement for Milestone Decision Authority Certification Memorandum Prior to Milestone A Approval .

MEMORANDUM FOR THE RECORD

SUBJECT: Milestone A Certification for _____Program

As required by section 2366a of title 10, United States Code, I have consulted with the Joint Requirements Oversight Council (JROC) on matters related to program requirements and military needs for the (*name of program*) and certify that:

(1) the program fulfills an approved initial capabilities document;

(2) the program is being executed by an entity with a relevant function as identified by the Secretary of Defense;

(3) a determination of applicability of core depot-level maintenance and repair capabilities has been made;

(4) an analysis of alternatives has been performed consistent with the study guidance developed by the Director, Cost Assessment and Program Evaluation (DCAPE);

(5) a cost estimate for the program has been submitted, with the concurrence of the DCAPE, and the level of resources required to develop, procure, and sustain the program is consistent with the priority level assigned by the JROC; and

(6) *[only include if the system duplicates a capability already provided by an existing system]* the duplication provided by this system and (*name of existing system*) program is necessary and appropriate.

10.1.2.2 Milestone B Certification Requirements

A major defense acquisition program may not receive a Milestone B approval until the Milestone Decision Authority certifies, without modification, from 10 USC 2366b of title 10, United States Code and as amended by Public law 111-23, "Weapon Systems Acquisition Reform Act of 2009" , and the FY 2012 NDAA , that:

1. I have received a business case analysis and certify on the basis of the analysis that:
    1. the program is affordable when considering the ability of the Department of Defense to accomplish the program's mission using alternative systems;
    2. appropriate tradeoffs among cost, schedule, and performance objectives have been made to ensure that the program is affordable when considering the per unit cost and total acquisition cost in the context of the total resources available during the period covered by the future-years defense program submitted during the

fiscal year in which the certification is made;
    3. reasonable cost and schedule estimates have been developed to execute, with the concurrence of the Director, Cost Assessment and Program Evaluation, the product development and production plan under the program;
    4. funding is available to execute the product development and production plan under the program, through the period covered by the future-years defense program submitted during the fiscal year in which the certification is made, consistent with the estimates described in subparagraph (C) for the program; and
2. I have received the results of the preliminary design review and conducted a formal post-preliminary design review assessment, and certify on the basis of such assessment that the program demonstrates a high likelihood of accomplishing it's intended mission; and
3. I further certify that:
    1. appropriate market research has been conducted prior to technology development to reduce duplication of existing technology and products:
    2. the Department of Defense has completed an analysis of alternatives with respect to the program;
    3. the Joint Requirements Oversight Council has accomplished it's duties with respect to the program pursuant to section 181(b) of title 10 United States Code , including an analysis of the operational requirements for the program;
    4. the technology in the program has been demonstrated in a relevant environment as determined by the Milestone Decision Authority on the basis of an independent review and assessment by the Assistant Secretary of Defense, Research and Engineering;
    5. life-cycle sustainment planning, including corrosion prevention and mitigation planning, has identified and evaluated relevant sustainment costs, throughout development, production, operation, sustainment, and disposal of the program, and any alternatives, and that such costs are reasonable and have been accurately estimated;
    6. an estimate has been made of the requirements for core depot-level maintenance and repair capabilities, as well as the associated logistics capabilities and the associated sustaining workloads required to support such requirements; and
    7. the program complies with all relevant policies, regulations, and directives of the Department of Defense.

See Figure 10.1.2.2.F1 for a sample Milestone B certification memorandum.

Figure 10.1.2.2 F1. Sample Required Statement for Milestone Decision Authority Certification Memorandum Prior to Milestone B Approval

MEMORANDUM FOR THE RECORD

SUBJECT: Milestone B Certification for _____ Program

As required by section 2366b of title 10, United States Code,

1. I have received a business case analysis and certify on the basis of the analysis that:

(A) the program is affordable when considering the ability of the Department of Defense to accomplish the program's mission using alternative systems;

(B) appropriate tradeoffs among cost, schedule, and performance objectives have been made to ensure that the program is affordable when considering the per unit cost and total acquisition cost in the context of the total resources available during the period covered by the future-years defense program submitted during the fiscal year in which the certification is made;

(C) reasonable cost and schedule estimates have been developed to execute, with the concurrence of the Director, Cost Assessment and Program Evaluation, the product development and production plan under the program;

(D) funding is available to execute the product development and production plan under the program, through the period covered by the future-years defense program submitted during the fiscal year in which the certification is made, consistent with the estimates described in subparagraph (C) for the program; and

2. I have received the results of the preliminary design review and conducted a formal post-preliminary design review assessment, and certify on the basis of such assessment that the program demonstrates a high likelihood of accomplishing it’s intended mission; and
3. development, production, operation, sustainment, and disposal of the program, and any alternatives, and that such costs are reasonable and have been accurately estimated; I further certify that:
    1. appropriate market research has been conducted prior to technology development to reduce duplication of existing technology and products:
    2. the Department of Defense has completed an analysis of alternatives with respect to the program;
    3. the Joint Requirements Oversight Council has accomplished it’s duties with respect to the program pursuant to section 181(b) of title 10 United States Code, including an analysis of the operational requirements for the program;
    4. the technology in the program has been demonstrated in a relevant environment as determined by the Milestone Decision Authority on the basis of an independent review and assessment by the Assistant Secretary of Defense, Research and Engineering;
    5. life-cycle sustainment planning, including corrosion prevention and mitigation planning, has identified and evaluated relevant sustainment costs, throughout
    6. an estimate has been made of the requirements for core depot-level maintenance and repair capabilities, as well as the associated logistics capabilities and the

associated sustaining workloads required to support such requirements; and
7. the program complies with all relevant policies, regulations, and directives of the Department of Defense.

10.2. Executive Review Forums

The following paragraphs address Department of Defense review forums and assessment reviews associated with major decision points in the acquisition lifecycle and other acquisition events requiring senior level review.

10.2.1. Defense Acquisition Board (DAB)

The DAB is the Departments senior-level review forum for critical acquisition decisions concerning Acquisition Category (ACAT) ID programs. The DAB is also the principal review forum enabling the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) to fulfill Chapter 144A of title 10, United States Code responsibilities concerning ACAT IAM Major Automated Information System programs. The use of any other forum for USD(AT&L) review of ACAT ID or IAM programs is discouraged.

10.2.1.1. Defense Acquisition Board (DAB) Composition

The Under Secretary of Defense for Acquisition, Technology, and Logistics (USD (AT&L)) is the Milestone Decision Authority (MDA) for Acquisition Category (ACAT) ID programs (and

ACAT IAM programs that have not been delegated). The USD(AT&L) chairs the DAB.

DAB members are the following executives: the Vice Chairman of the Joint Chiefs of Staff; the Secretaries of the Military Departments; the Under Secretary of Defense (Policy); the Under Secretary of Defense (Comptroller); the Under Secretary of Defense (Personnel & Readiness); the Under Secretary of Defense (Intelligence); the DoD Chief Information Officer; the Director, Operational Test & Evaluation; the Director, Cost Assessment and Program Evaluation; the Deputy Chief Management Officer (for Defense Business Systems only), and Director, Acquisition Resources & Analysis (as the DAB Executive Secretary).

DAB advisors include the Assistant Secretary of Defense (Acquisition); Assistant Secretary of Defense (Logistics & Material Readiness); Assistant Secretary of Defense (Research and Engineering); Deputy Under Secretary of Defense (Installations and Environment); DoD Deputy General Counsel (Acquisition & Logistics); DoD Component Acquisition Executives; the relevant Overarching Integrated Product Team (OIPT) Leader(s); Director, National Geospatial-Intelligence Agency; Deputy Director, Cost Assessment; Director, Defense Pricing; Director, Systems Engineering, Director, Developmental Test & Evaluation; Deputy Assistant Secretary of Defense (Manufacturing and Industrial Base Policy); Director International Cooperation; Assistant Secretary of Defense (Legislative Affairs); Director, Performance Assessments and Root Cause Analysis; Cognizant Program Executive Officer(s) and Program Manager(s). The USD(AT&L) may request that other department officials participate in reviews, as required.

10.2.1.2. Conduct of Defense Acquisition Board (DAB) Reviews

DAB Reviews are conducted for ACAT ID and IAM programs at major decision points, including; the Materiel Development Decision, the Technology Development decision, the pre-Engineering and Manufacturing Development (EMD) review, the EMD decision, the Production decision, the Full-Rate Production decision Review/Full Deployment decision Review, at Interim Program Reviews, and at other times as necessary. Whenever possible, these reviews should take place in the context of the existing Integrated Product Team and acquisition milestone decision review processes. An Acquisition Decision Memorandum (ADM) signed by the USD(AT&L) or other delegated decision authority documents the decision(s) and program direction resulting from the review. Any memorandum the USD(AT&L) signs concerning ACAT ID or IAM programs is referred to as an ADM and must be staffed by the DAB Executive Secretary (Director, Acquisition Resources and Analysis).

The USD(AT&L) is the Defense Acquisition Executive (DAE) and generally chairs the DAB unless he has otherwise delegated the chair for a particular program or event. However, ACAT ID and IAM decision and program reviews should be referred to as "DAB Reviews" or "DAB Meetings" and not "DAE Reviews."

10.2.1.3. Defense Acquisition Board (DAB) Presentation

The DAB review is intended to be a measured, intellectual examination of unresolved issues. Issues that have previously been resolved need not be discussed. Issue deliberation should focus on the risks and opportunities associated with the potential courses of action and evidentiary

arguments should be supported by critical, objective, factual data.

The OIPT Leader is expected to shape the DAB briefing to ensure that it captures and objectively represents the unresolved issues still requiring discussion, the data to support such discussion, and all other critical information necessary to conduct a successful DAB review-above all, information pertaining to the affordability and cost effectiveness of the program. At the beginning of each DAB, the OIPT leader will state the decision sought (or other purpose for the review) and immediately tee up the unresolved issues. The OIPT leader will ensure that evidentiary arguments (pro and con) are presented and supporting data will be presented by the appropriate principal DAB member or advisor. Following the discussion of the issues and the affordability and cost effectiveness of the program, the remaining mandatory information charts will be presented and reviewed.

A notional set of DAB Milestone Decision briefing charts is available for use. It is expected that, except for the limited number labeled mandatory, these charts will be used as a guide only and will be appropriately tailored for the specific program and decision under consideration. A set of information checklists is also available to aid in functional reviews of required information during the DAB preparation process.

10.2.1.4. Acquisition Decision Memorandum (ADM) Coordination and ADM Action Item Tracking

The decisions and direction resulting from of each milestone and other major decision point reviews must be documented in an ADM. All ACAT ID and ACAT IAM ADMs are written by the office of the Director, Acquisition Resources and Analysis (ARA) and the pertinent Overarching Product Team (OIPT) Leader. ARA staffs all ADMs for coordination. Prior to release for formal staffing, ARA submits each ADM to the Principal Deputy Under Secretary for Defense (Acquisition, Technology, and Logistics) (PDUSD(AT&L)) or the Under Secretary for Defense (Acquisition, Technology, and Logistics) for initial review.

All ADM-directed actions are tracked and monitored by the OIPT leaders and reported for closure, compilation, and summation in the recently established Defense Acquisition Executive (DAE) Action Tracker (DAT) automated system (https://ebiz.acq.osd.mil/DAT). ARA maintains the DAT system and will periodically review the status of overdue ADM actions with the PDUSD(AT&L), the Component Acquisition Executives, the Assistant Secretary of Defense (Acquisition), and the OIPT Leaders.

10.2.1.5. Preparation for Defense Acquisition Board (DAB) Reviews

Programs must be adequately reviewed far enough ahead of a DAB meeting so that all issues associated with the desired decision can be identified and, optimally, resolved prior to the DAB review. Any issues that cannot be resolved prior to the DAB review should be well defined and presented with the relevant data needed to decide on a course of action among the available alternatives. Resolving any remaining issues should be the focus of the DAB meeting itself.

Early in the DAB preparation process, the Assistant Secretary of Defense (Acquisition)

(ASD(A)) will conduct a DAB Planning Meeting (DPM) with the Overarching Integrated Product Team (OIPT) Leader and a service or agency representative to discuss the pending decision and any open issues that may be anticipated to exist at the time of the DAB.

In order to ensure DAB reviews focus on issues and the data that affects issue resolution, the Principal Deputy Under Secretary of Defense (Acquisition, Technology, and Logistics) (PDUSD(AT&L)) or the Under Secretary of Defense (Acquisition Technology, and Logistics) (USD(AT&L)) will hold a DAB Readiness Meeting (DRM) as soon as possible after the final pre-DAB OIPT meeting-approximately one work week before each scheduled DAB. The DRM will focus on the purpose of the DAB, discuss and consider any outstanding issues on the specific program(s), and determine the readiness of the program(s) to proceed to a DAB for a discussion/decision.

Based upon the results of the DRM, the PDUSD(AT&L) or the USD(AT&L) will determine the whether to proceed as scheduled; to postpone the DAB while additional information is obtained, or whether the decision may be made and documented in an Acquisition Decision Memorandum without convening a formal DAB meeting (a.k.a. a paper DAB). If there are no issues associated with the requested decision, then a formal meeting should not be necessary.

10.2.1.5.1. Preparation Timeline for Defense Acquisition Board (DAB) Reviews

The nominal timeline (in business days) to support the DPM, DRM and DAB is listed below:

0 DAB

-3 DAB Read-ahead submitted

-5 DRM

-10 OIPT Report submitted

-20 OIPT conducted

-30 Final Document Check to Support OIPT

-40 DAB Planning Meeting

-45 Submittal of Final Documents Due to OSD

The OIPT Chair will conduct meetings and form working groups as needed to support the DAB preparation process.

10.2.1.5.2. Defense Acquisition Board (DAB) Planning Meeting (DPM)

The DPM is a short informal meeting conducted by the Assistant Deputy Secretary of Defense (Acquisition) (ASD(A)) approximately two months before the scheduled DAB review. The DPM

serves as a heads up for that upcoming review and provides an opportunity to ensure that the Overarching Integrated Product Team (OIPT) Lead and the Component Acquisition Executive (CAE) staff are prepared to adequately cover any concerns that the Under Secretary of Defense, Acquisition Technology, and Logistics may have at the DAB review.

The purpose is to give the CAE and the OIPT Lead time to examine such potential issues and any actions needed to deal with major concerns that have already been raised. Content for the DPM will be at the discretion of the OIPT Chair and service (or agency) presenting the program for DAB review.

The OIPT chair, in coordination with the relevant service or agency will schedule this meeting, which will nominally be at least two to three months before the DAB is scheduled.

Attendance at the DPM is limited to the OIPT lead plus one staff member, two or three people representing the pertinent CAE(s), and the DAB Executive Secretary plus one staff member--unless otherwise directed, or approved, by the ASD(A).

10.2.1.5.3. Defense Acquisition Board (DAB) Readiness Meeting (DRM)

The DRM is a small, informal meeting conducted by the Principal Deputy Under Secretary of Defense, Acquisition Technology, and Logistics (PDUSD(AT&L)) or the Under Secretary of Defense, Acquisition Technology, and Logistics (USD(AT&L)) approximately two weeks before the DAB review and after the Overarching Integrated Product Team (OIPT) meeting. The purpose of the DRM is for the PDUSD(AT&L) or the USD(AT&L) to review the OIPT results to understand any remaining open issues that the DAB would have to consider and-to review the proposed DAB presentation, including materials/data necessary to resolve any issues that would be presented to the DAB to support the decision.

Content for the DRM will be specific to the decision sought for the particular program and will be issue-focused. The actual briefing material and backup material for the DAB itself should be ready for review-with the presentation in final form. The proposed DAB brief and the OIPT Leaders report should be included in the DRM read ahead.

Attendance at the DRM is limited to the OIPT lead plus one staff member, two or three people representing the pertinent CAE(s), and the DAB Executive Secretary plus one staff member--unless otherwise directed, or approved, by the Assistant Secretary of Defense (Acquisition). (On an as required basis, other OSD representatives may also be requested to attend to discuss unresolved issues planned to be addressed at the DAB review.)

The DRM is not intended to be a decision meeting; however, in some cases, it may lead to a recommendation or decision to conduct a "paper DAB" review.

10.2.2. Joint Requirements Oversight Council (JROC)

10.2.3. Functional Capabilities Boards (FCBs)

10.2.2. Joint Requirements Oversight Council (JROC)

The Joint Requirements Oversight Council (JROC) reviews and approves capabilities documents designated as JROC interest and supports the acquisition review process. The JROC is composed of the Vice Chairman of the Joint Chiefs of Staff, who is the Chairman of the Council; the Service Vices/Assistant Commandant; and Combatant Commanders (or Deputies) when matters related to the area of responsibility or functions of that command will be under consideration by the Council.

In accordance with the CJCS Instruction 3170.01 , the Joint Staff reviews all Joint Capabilities Integration and Development System (JCIDS) documents and assigns a Joint Potential Designator. The JROC validates capability needs. The JROC also validates the key performance parameters when it approves the associated capabilities document. The JROC charters Functional Capabilities Boards (FCBs). The boards are chaired by a JROC-designated chair and, for appropriate topics, co-chaired by a representative of the Milestone Decision Authority.

10.2.3. Functional Capabilities Boards (FCBs)

Functional Capabilities Boards are the lead coordinating bodies to ensure that the joint force is best served throughout the JCIDS and acquisition processes. The JCIDS process encourages early and continuous collaboration with the warfighter and acquisition communities to ensure that new capabilities are conceived and developed in the joint warfighting context. The JROC, at its discretion, may review any JCIDS issues which may have joint interest or impact. The JROC will also review programs at the request of, and make recommendations as appropriate to, the Secretary of Defense, Deputy Secretary of Defense, and the Under Secretary of Defense (Acquisition, Technology, and Logistics).

10.2.4. Defense Business System Management Committee (DBSMC)

The DBSMC was established by the Secretary of Defense under authority delegated pursuant to section 186 of title 10, United States Code and in accordance with DoDI 5105.18 ,

The DBSMC advises the DBSMC Chair who is responsible for approving Certification Authority (CA) certification of funds associated with Defense Business System modernization efforts.

10.2.5. Investment Review Boards (IRBs)

IRBs are boards established by an Under Secretary or Assistant Secretary of Defense under authority delegated pursuant to section 2222(f) of title 10 United States Code to conduct the Defense Business System (DBS) review process required by section 2222(g) of the same title.

The IRBs are responsible for advising the Milestone Decision Authority. Required acquisition decision documentation is submitted to the IRB membership no later than 30 calendar days prior to the IRB. IRBs review :

- Problem Statements, which shall be approved by the IRB Chair;
- Requirements changes and technical configuration changes for programs in development that have the potential to impact cost and schedule; and
- The Business Case to determine that business process reengineering (BPR) efforts have been undertaken.

The DoD Components are required to establish or employ decision bodies with similar responsibilities for DBS that do not meet the Major Automated Information System threshold.

10.2.6. DoD Component Program Decision Review Processes

The OSD-level decision review processes discussed in this section of the Guidebook deal specifically with ACAT ID and ACAT IAM programs, selected Pre-Major Defense Acquisition Programs/Pre-Major Automated Information System Programs, and Under Secretary of Defense (Acquisition, Technology, and Logistics) Special Interest Programs. DoD Component Acquisition Executives will develop tailored procedures that meet statutory intent for programs under their cognizance.

10.2.7. Configuration Steering Boards (CSBs)

Section 814 of P.L. 110-417 requires each Department of Defense Component Acquisition Executive (CAE) to establish and chair a CSB with broad executive membership including senior representatives from the Offices of the Under Secretary of Defense (Acquisition, Technology, and Logistics), the Joint Staff, the Chief of Staff and Comptroller of the Armed Force concerned, other Armed Forces where appropriate, the military deputy to the CAE, the Program Executive Officer (PEO), and other senior representatives of the Office of the Secretary of Defense and the military department concerned, as appropriate.

1. Each CSB must meet at least annually to review all requirements changes and any significant technical configuration changes for ACAT I and IA programs in development that have the potential to result in cost and schedule impacts to the program. Such changes will generally be rejected, deferring them to future blocks or increments. Changes shall not be approved unless funds are identified and schedule impacts mitigated.
2. Each Program Manager, in consultation with the cognizant PEO, must, on a roughly annual basis, identify and propose a set of descoping options, with supporting rationale

addressing operational implications, to the CSB that reduce program cost or moderate requirements. If the program is an ACAT ID or IAM program, the CSB chair must recommend to the Milestone Decision Authority which of these options should be implemented. Final decisions on descoping option implementation shall be coordinated with the Joint Staff and military department requirements approval officials.

10.3. Integrated Product and Process Development (IPPD)

IPPD is the Department of Defense (DoD) management technique that simultaneously integrates all essential acquisition activities through the use of multidisciplinary teams to optimize design, manufacturing, and supportability processes. One of the key IPPD tenets is multidisciplinary teamwork through Integrated Product Teams .

IPPD facilitates meeting cost and performance objectives from product concept through production, including field support. The 10 tenets of IPPD can be summarized into the following 5 principles:

- Customer Focus
- Concurrent Development of Products and Processes
- Early and Continuous Life-Cycle Planning
- Proactive Identification and Management of Risk
- Maximum Flexibility for Optimization and Use of Contractor Approaches

10.3.1. Role of Integrated Product Teams (IPTs)

Defense acquisition works best when all of the DoD Components work together. Cooperation and empowerment are essential. Per Department of Defense Directive 5000.01 , the Department's acquisition community shall implement the concepts of Integrated Product and Process Development (IPPD) and IPTs as extensively as possible.

IPTs are an integral part of the Defense acquisition oversight and review process. For Acquisition Category (ACAT) ID and IAM programs, there are generally two levels of IPTs: the Working-Level Integrated Product Team (WIPT) and the Overarching Integrated Product Team (OIPT) . Each program should have an OIPT and at least one WIPT. WIPTs should focus on a particular topic such as cost/performance, program baseline, acquisition strategy, test and evaluation, or contracting. An Integrating Integrated Product Team (IIPT), which is itself a WIPT, should coordinate WIPT efforts and cover all program topics, including those not otherwise assigned to another IPT. IPT participation is the primary way for any organization to participate in the acquisition program. IIPTs are essential for ACAT ID and IAM programs, in that they facilitate OSD Staff-level program insight into MDAPs and MAIS programs at the program level and provide the requisite input to the OIPT.

10.3.2. Overarching Integrating Product Team (OIPT) Procedures and Assessment

Normally, all Acquisition Category (ACAT) ID and IAM programs will have an OIPT to provide assistance, oversight, and review as the program proceeds through its acquisition life cycle.

10.3.2.1. Overarching Integrating Product Team (OIPT)

First and foremost, Office of the Secretary of Defense (OSD) OIPTs are teams expected to collectively assist the Defense Acquisition Executive (DAE) in making sound investment decisions for the Department and to ensure programs are structured and resourced to succeed. Success is defined as affordable, executable programs that provide the most value achievable for the resources invested by the Department.

OSD OIPTs are not decision bodies and their respective leaders do not supplant the authority and responsibilities of the Program Manager, Program Executive Officer, Component Acquisition Executive, or DAE. The acquisition chain of command is expected to thoroughly prepare programs for decisions and to execute those decisions. OSD OIPTs bring independent judgment and perspectives from various staff offices and provide a measure of due diligence in support of DAE decisions. They often bring different perspectives than the Components and should be concerned not only with the programmatic, technical, and business aspects of a program but also with critically examining and considering the program in the broader context to include joint portfolios, design and performance trade-space, overall risk (technology, integration/engineering, schedule, and cost), affordability, competitive opportunities, industrial base implications, and the nature of the business decision under consideration.

OSD OIPTs also have a key role in helping programs complete the requirements of the statutory and regulatory acquisition framework, much of which involves documentation the team members

review in support of the decision process. Typically, these documents have been reviewed within a Service and at working levels of the OSD staff and Service staffs to ensure they reflect sound planning and assessments before they are submitted for final review. These documents should generally not be prepared solely for staff review and approval, but be intended primarily for use within the program as planning and management tools that are highly specific to the program and tailored to meet program needs. They should be prepared and reviewed with this goal in mind.

OSD OIPT meetings should be the culmination of the staffing process and lead to well-staffed and objectively presented decision options on any open issues for discussion at the Defense Acquisition Board review and subsequent acquisition decisions. To work effectively, all OIPT members should attempt to resolve issues at the lowest possible level.

To perform their work, OSD OIPTs and their members should have access to all the data necessary to do their jobs effectively. Program offices and Component staffs are expected to provide data needed to resolve issues and to support DAE decisions in a timely manner.

10.3.2.2. Overarching Integrating Product Team (OIPT) Leaders

For those programs where the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) is the Milestone Decision Authority, OIPTs are a well-established and integral part of the defense acquisition oversight and milestone decision review process. While OIPTs are not decision-making bodies, they provide a mechanism to coordinate and conduct staff preparation for USD(AT&L) program decisions and to help execute those decisions.

There are currently five OIPT leaders in the Office of the Secretary of Defense that are responsible for broadly defined portfolios of programs and capabilities. Programs with the Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD(AT&L)) as the Milestone Decision Authority are normally assigned to one of these OIPT leaders as the lead staff element with the broad responsibility for the program:

- Deputy Assistant Secretary of Defense (DASD) (Strategic and Tactical Systems)
- DASD (Space & Intelligence)
- DASD (Command, Control, Communications & Cyber)
- OIPT Leader for Defense Business Systems (Office of the Deputy Chief Management Officer)
- OIPT Leader for Nuclear, Chemical, & Biological Defense programs

10.3.2.2.1. Overarching Integrating Product Team (OIPT) Leaders Roles & Responsibilities

OSD OIPT leaders form and lead OIPTs to review the programs coming forward to the Defense Acquisition Board (DAB) for a Defense Acquisition Executive (DAE) decision. OIPT leaders also prepare content for discussions at DAB Planning Meetings and DAB Readiness Meetings in collaboration with the responsible Component, the DAB Executive Secretary, and any OIPT members with outstanding issues. OIPT Leaders are responsible for coordinating staff inputs, facilitating the resolution of issues at lower levels when possible, and for ensuring that objective

and complete data is presented to the DAE in support of DAE decisions, including milestone decisions.

OSD OIPT leaders are expected, with the assistance of the OIPT members, to maintain good situational awareness of program execution status and, with the Component Acquisition Executives (CAEs) to keep the DAE informed of any program issues. The Defense Acquisition Executive Summary (DAES) process serves as one mechanism to monitor programs and elevate issues. DAES meetings are forums for sharing and learning across the senior levels of the acquisition community. However, OIPT leaders and OIPT members should not delay surfacing problems awaiting a DAES cycle. Bad news does not get better with age and the earlier issues are addressed, the greater the opportunity to remediate them. Similarly, good outcomes and best practices should also be reported and widely shared. Monitoring program execution should not generate unnecessary meetings, but rather, the evolving tools, data, and monitoring mechanisms that the Components and the Office of the Secretary of Defense have in place should accomplish this function. In general, and consistent with their responsibilities, OIPT leaders (and all staff members) should work to minimize the overhead burden placed on Program Managers. The OIPT leaders are also expected to track and monitor to successful completion all Acquisition Decision Memorandum-directed actions and notify the DAE of issues or events that would affect their completion.

In cases where there is substantive disagreement between staff members and a Component, the OIPT leader is expected to work with the relevant staff and Component to ensure the data necessary to support a decision is made available to the DAE and to quickly elevate the issues to be brought forward for decisions. In general the staff, including the OIPT leader, does not have directive authority over programs and issues should be elevated for decision when there is a disagreement that cannot be readily resolved. The OIPT leader should expedite this process so that programs are not delayed due to disagreements over issues. The OIPT leader may make a recommendation on any issue, but his or her fundamental responsibility is to objectively represent the views of the OIPT members from across OSD and the Services.

10.3.2.3. Overarching Integrating Product Team (OIPT) Member Roles & Responsibilities

Office of the Secretary of Defense (OSD) OIPT members should be empowered to represent their organizations perspectives and make commitments on behalf of their technical domain, functional area, and organization.

OIPT members should proactively assist programs in implementing Better Buying Power Initiatives. In many cases, OIPT members will have knowledge of techniques or approaches that could promote competition, reduce costs, improve productivity, or reduce non-productive processes.

Members should raise issues at the earliest possible opportunity and work to resolve those issues expeditiously. It is a disservice to the programs and process for issues to remain hidden or for issues to arise unexpectedly at senior-level decision meetings such as the DAB. If an OIPT member feels an issue is not resolved satisfactorily, the DAE should be informed. OIPT members with differing views will be part of any discussion and afforded the opportunity to

express their views with supporting information directly if desired. Any issue raised should be logically presented with appropriately detailed technical or other relevant data to allow for an informed decision.

Table 10.3.2.3.T1 below is a list of nominal organizational members for a typical OSD OIPT. Membership can be adjusted as appropriate by OIPT leaders.

Table 10.3.2.3.T1. Notional OIPT Membership

Vice Chairman of the Joint Chiefs of Staff/J-8	Office of the Deputy Assistant Secretary of Defense for Developmental Test and Evaluation
Office of the Under Secretary of Defense for Policy	Office of the Director for Chemical and Material Risk Management
Office of the Under Secretary of Defense (Comptroller)	Office of the Deputy Assistant Secretary of Defense (Manufacturing and Industrial Base Policy)
Office of the Under Secretary of Defense for Personnel and Readiness	Office of the Assistant Secretary of Defense for Logistics and Materiel Readiness
Office of the Under Secretary of Defense for Intelligence	Office of the Assistant Secretary of Defense for Operational Energy Plans and Programs
Office of the Director, Operational Test and Evaluation	Office of the Deputy Assistant Secretary of Defense Research
Office of the Director, Cost Analysis and Program Evaluation	Office of the Deputy Assistant Secretary of Defense Systems Engineering
Office of the Director, Acquisition Resources and Analysis	Cognizant Program Executive Officer(s)
Office of the Director, Defense Pricing	Cognizant Program Manager
Office of the Director, Defense Procurement and Acquisition Policy	Office of the Army Acquisition Executive
Office of the Director, Performance Assessment and Root Cause Analyses	Office of the Navy Acquisition Executive
Office of the Director, International Cooperation	Office of the Air Force Acquisition Executive
Office of the Chief Information Officer	

10.3.2.4. Overarching Integrating Product Team (OIPT) Products

The cognizant OIPT leader will provide a written report to the Defense Acquisition Executive not more than 10 business days after the OIPT meeting and not less than 15 business days prior to a scheduled Defense Acquisition Board (DAB) date (i.e., well before the DAB Readiness Meeting). The OIPT Report will document an integrated program assessment that takes OIPT members independent assessments into consideration. It will also provide a recommendation for the decision(s) to be made and include a discussion of all unresolved issues. OIPT leaders will ensure all OIPT member perspectives and concerns (including dissenting views) are accurately

represented. OIPT members, at their discretion, may provide attachments to the OIPT report reflecting their individual perspectives and recommendations and providing the basis for those views.

The OIPT leader will assist the Program Manager and Program Executive Officer in preparing program decision materials for the DAB. DAB briefings and supporting material should contain all the data necessary to support the pending decisions presented in a logical straightforward manner using the DAB templates as a starting point.

10.3.3. Integrating Integrated Product Team (IIPT) and Working-Level Integrated Product Team (WIPT) Procedures, Roles, and Responsibilities

The Program Manager (PM), or designee, in collaboration with the OSD staff specialists from the offices of the OIPT Leader and other key stakeholders for the assigned program, should collaboratively form IIPTs and WIPTs as necessary. IIPTs and WIPTs should meet only as required to help the program manager plan program structure and documentation and resolve issues. While there is no one-size-fits-all WIPT approach, the following basic tenets should apply:

- The PM is in charge of the program.
- IIPTs and WIPTs are advisory bodies to the PM.
- IIPTs are also advisory bodies to the OIPT.
- Direct communication between the program office and all levels in the acquisition oversight and review process is expected as a means of exchanging information and building trust.

10.3.3.1. Industry Participation

Industry representatives may be invited to a Working-Level Integrated Product Team (WIPT) or Integrating Integrated Product Team (IIPT) meeting to provide information, advice, and recommendations to the IPT; however, the following policy should govern their participation:

- Industry representatives will not be formal members of the IPT.
- Industry participation will be consistent with the Federal Advisory Committee Act .
- Industry representatives may not be present during IPT deliberations on acquisition strategy or competition sensitive matters, nor during any other discussions that would give them a marketing or competitive advantage.
- At the beginning of each meeting, the IPT chair should introduce each industry representative, including their affiliation, and their purpose for attending.
- The chair should inform the IPT members of the need to restrict discussions while industry representatives are in the room, and/or the chair should request the industry representatives to leave before matters are discussed that are inappropriate for them to hear.
- Support contractors may participate in WIPTs and IIPTs, but unless specifically authorized by the organization they represent, they may not commit the staff organization they support to a specific position. The organizations they support are responsible for

ensuring the support contractors are employed in ways that do not create the potential for a conflict of interest. Contractors supporting staff organizations may participate in Overarching Integrated Product Team (OIPT) discussions; however, they will not be permitted to represent the position of the supported organization and they may be asked to sign non-disclosure statements prior to deliberations.

Given the sensitive nature of OIPT discussions, industry representatives and support contractors may not be permitted to participate in certain OIPT discussions. However, the OIPT leader may permit contractors to make presentations to the OIPT, when such views will better inform the OIPT and will not involve the contractors directly in Government decision making.

10.4. Role of Exit Criteria

Each Milestone Decision Authority (MDA) should use exit criteria for ACAT I and ACAT IA programs during an acquisition phase. Prior to each milestone decision point and at other decision reviews, the Program Manager will develop and propose exit criteria appropriate to the next phase or effort of the program. The Overarching Integrated Product Team will review the proposed exit criteria and make a recommendation to the MDA. Exit criteria approved by the MDA will be published in the Acquisition Decision Memorandum.

System-specific exit criteria normally track progress in important technical, schedule, or management risk areas. Unless waived, or modified by the MDA, exit criteria must be satisfied before the program may continue with additional activities within an acquisition phase or proceed into the next acquisition phase (depending on the decision with which they are

associated). Exit criteria should not be part of the Acquisition Program Baseline (APB) and are not intended to repeat or replace APB requirements or the phase-specific entrance criteria specified in DoD Instruction 5000.02 . They should not cause program deviations.

10.5. Role of Independent Assessments

Assessments, independent of the developer and the user, provide a different perspective of program status. However, requirements for independent assessments (for example, Program Support Reviews , Assessments of Operational Test Readiness , independent cost estimates, and technology readiness assessments) must be consistent with statutory requirements, policy, and good management practice. Senior acquisition officials consider these assessments when making acquisition decisions. Staff offices that provide independent assessments should support the orderly and timely progression of programs through the acquisition process. Overarching Integrated Product Team access to independent assessments that provide additional program perspectives facilitates full and open discussion of issues.

10.5.1. Independent Cost Estimate

Section 2334 of title 10, United States Code , requires the Director, Cost Assessment and Program Evaluation (DCAPE) to conduct independent cost estimates (ICEs) on Major Defense Acquisition Programs (MDAPs) and Major Automated Information Systems (MAIS) programs for which the Under Secretary of Defense (Acquisition, Technology, and Logistics) is the Milestone Decision Authority. The statute also requires DCAPE to review Department of Defense (DoD) Component cost estimates and cost analyses conducted in connection with MDAPs and MAIS programs.

Further, the statute gives DCAPE the authority to prescribe the policies and procedures for the conduct of all cost estimates for DoD acquisition programs and issue guidance relating to the full consideration of life-cycle management and sustainability costs.

10.5.1.1. Independent Cost Estimate (ICE) for Major Defense Acquisition Programs (MDAPs)

The Director, Cost Assessment and Program Evaluation (DCAPE) conducts ICEs and cost analyses for MDAPs for which the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) is the Milestone Decision Authority in advance of:

(1) Any decision to enter low rate initial production, or full rate production.

(2) Any certification pursuant to sections 2366a , 2366b , or 2433a of title 10, United States Code.

(3) At any other time considered appropriate by the DCAPE or upon the request of the USD(AT&L).

10.5.1.2. Independent Cost Estimate (ICE) for Major Automated Information Systems (MAIS) Programs

The Director, Cost Assessment and Program Evaluation (DCAPE), conducts ICEs and cost analyses for MAIS programs for which the Under Secretary of Defense (Acquisition, Technology and Logistics) (USD(AT&L)) is the Milestone Decision Authority in advance of:

(1) Any report pursuant to section 2445c(f) of title 10, United States Code.

(2) At any other time considered appropriate by the DCAPE or upon the request of the USD(AT&L).

10.5.1.3. Review of Cost Estimates

The Director, Cost Assessment and Program Evaluation (DCAPE) participates in the discussion of any discrepancies related to cost estimates for Major Defense Acquisition Programs (MDAPs) and Major Automation Information System (MAIS) programs, comments on deficiencies regarding the methodology or the execution of the estimates, concurs with the choice of the cost estimate used to support the Acquisition Program Baseline or any of the cost estimates identified in paragraphs 10.5.1.1. and 10.5.1.2. and participates in the consideration of any decision to request authorization of a multi-year procurement contract for a MDAP.

10.5.1.4. Cost Estimate Confidence Levels

The Director, Cost Assessment and Program Evaluation (DCAPE) and the Secretary of the Military Department concerned or the head of the Defense Agency concerned (as applicable) state the confidence level used in establishing the cost estimate for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) programs, ensure that the confidence level provides a high degree of confidence that the program can be completed without the need for significant adjustment to program budgets, and provides the rationale for selecting the confidence level. The confidence level statement shall be included in the Acquisition Decision Memorandum approving the Acquisition Program Baseline, and in any documentation of cost estimates for MDAPs or MAIS programs prepared in association with the events identified in paragraphs 10.5.1.1. and 10.5.1.2. The confidence level statement shall also be included in the next Selected Acquisition Report prepared in compliance with section 2432 of title 10, United States Code , or in the next quarterly report prepared in compliance with section 2445c of title 10, United States Code .

10.5.2. Technology Maturity and Technology Readiness Assessments

A Technology Readiness Assessment (TRA) is a systematic, metrics-based process that assesses the maturity of, and the risk associated with, critical technologies to be used in Major Defense Acquisition Programs (MDAPs). It is conducted by the Program Manager (PM) with the assistance of an independent team of subject matter experts (SMEs). It is provided to the

Assistant Secretary of Defense for Research and Engineering (ASD(R&E)) and will provide part of the basis upon which he advises the Milestone Decision Authority (MDA) at Milestone (MS) B or at other events designated by the MDA to assist in the determination of whether the technologies of the program have acceptable levels of risk-based in part on the degree to which they have been demonstrated (including demonstration in a relevant environment)-and to support risk-mitigation plans prepared by the PM.

A TRA is required by Department of Defense Instruction (DoDI) 5000.02 for MDAPs at MS 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.

A TRA focuses on the programs critical technologies (i.e., those that may pose major technological risk during development, particularly during the Engineering and Manufacturing Development (EMD) phase of acquisition). Technology Readiness Levels (TRLs) can serve as a helpful knowledge-based standard and shorthand for evaluating technology maturity, but they must be supplemented with expert professional judgment.

The program manager should identify critical technologies, using tools such as the Work Breakdown Structure. In order to provide useful technology maturity information to the acquisition review process, technology readiness assessments of critical technologies and identification of critical program information (CPI) must be completed prior to Milestone Decision points B and C.

10.5.2.1. Assessment of MDAP Technologies

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 Milestone Decision Authority.

10.5.2.2. Technology Readiness Levels (TRLs)

A summary table of TRL descriptions, Table **10.5.2.2.T1** follows:

Table 10.5.2.2.T1. TRL Descriptions

Technology Readiness Level	Description
1. Basic principles observed and reported.	Lowest level of technology readiness. Scientific research begins to be translated into applied research and development. Examples might include paper studies of a technology's basic properties.

2. Technology concept and/or application formulated.	Invention begins. Once basic principles are observed, practical applications can be invented. Applications are speculative and there may be no proof or detailed analysis to support the assumptions. Examples are limited to analytic studies.
3. Analytical and experimental critical function and/or characteristic proof of concept.	Active research and development is initiated. This includes analytical studies and laboratory studies to physically validate analytical predictions of separate elements of the technology. Examples include components that are not yet integrated or representative.
4. Component and/or breadboard validation in laboratory environment.	Basic technological components are integrated to establish that they will work together. This is relatively "low fidelity" compared to the eventual system. Examples include integration of "ad hoc" hardware in the laboratory.
5. Component and/or breadboard validation in relevant environment.	Fidelity of breadboard technology increases significantly. The basic technological components are integrated with reasonably realistic supporting elements so it can be tested in a simulated environment. Examples include "high fidelity" laboratory integration of components.
6. System/subsystem model or prototype demonstration in a relevant environment.	Representative model or prototype system, which is well beyond that of TRL 5, is tested in a relevant environment. Represents a major step up in a technology's demonstrated readiness. Examples include testing a prototype in a high-fidelity laboratory environment or in simulated operational environment.
7. System prototype demonstration in an operational environment.	Prototype near, or at, planned operational system. Represents a major step up from TRL 6, requiring demonstration of an actual system prototype in an operational environment such as an aircraft, vehicle, or space. Examples include testing the prototype in a test bed aircraft.
8. Actual system completed and qualified through test and demonstration.	Technology has been proven to work in its final form and under expected conditions. In almost all cases, this TRL represents the end of true system development. Examples include developmental test and evaluation of the system in its intended weapon system to determine if it meets design specifications.

9. Actual system proven through successful mission operations.	Actual application of the technology in its final form and under mission conditions, such as those encountered in operational test and evaluation. Examples include using the system under operational mission conditions.

The use of TRLs enables consistent, uniform, discussions of technical maturity across different types of technologies. Decision authorities will consider the recommended TRLs (or some equivalent assessment methodology, e.g., Willoughby templates) when assessing program risk. TRLs are a measure of technical maturity. They do not discuss the probability of occurrence (i.e., the likelihood of attaining required maturity) or the impact of not achieving technology maturity.

For additional information, see the on-line TRA Deskbook .

10.5.3. Preliminary Design Review (PDR) Review and Assessment

10.5.3.1. Preliminary Design Review (PDR) Report

10.5.4. Post-Preliminary Design Review (Post-PDR) Assessment Decision Review

10.5.5. Post-Critical Design Review (Post-CDR) Assessment

10.5.6. Independent Program Assessment (IPA)

10.5.7. Performance Assessments and Root Cause Analyses (PARCA)

10.5.7.1. Performance Assessments

10.5.7.2. Root Cause Analyses

10.5.8. Enterprise Risk Assessment Methodology (ERAM)

10.5.3. Preliminary Design Review (PDR) Review and Assessment

P.L. 111-23, the Weapon Systems Acquisition Reform Act of 2009 , established conduct of PDR before MS B as a mandatory requirement for all MDAPs. The Program Manager (PM) shall plan a Preliminary Design Review (PDR); PDR planning shall be reflected in the Technology Development Strategy (TDS), details should be provided in the Systems Engineering Plan (SEP), and shall be conducted consistent with the policies specified in DoD Instruction 5000.02 . The plan for PDR will be reflected in the TDS to be approved by the MDA at MS A. Post-PDR assessments will be conducted in association with MS B preparations and will be formally considered by the Milestone Decision Authority (MDA) at the MS B 2366b certification review.

PDRs before MS B for other than MDAPs will be approved by the MDA when consistent with TDS or Acquisition Strategy objectives. When the PDR is conducted before MS B, a post-PDR assessment will be conducted in association with the MS B review and formally considered by

the MDA at the MS B review. If the PDR is conducted after MS B, the MDA will conduct a post-PDR assessment at a time reflected in the approved acquisition strategy.

If a PDR has not been conducted prior to Milestone B (non-MDAPs), the PM shall plan for a PDR as soon as feasible after program initiation. PDR planning shall be reflected in the Acquisition Strategy and conducted consistent with the policies specified in paragraph 5.d.(6) of DoD Instruction 5000.02 .

10.5.3.1. Preliminary Design Review (PDR) Report

The PDR Report shall be provided as a memorandum to the Milestone Decision Authority (MDA). When the Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD(AT&L)) is the MDA for a program, the PDR Report should b provided by a memorandum to the USD(AT&L), with copies to the Deputy Assistant Secretary of Defense (Systems Engineering) and the Overarching Integrated Product Team Leader.

The PDR Report should include:

1. A comprehensive list of the systems engineering products that make up the allocated baseline (to include the preliminary design specifications for all configuration items) and that were subject to review;
2. A list of the participants in the review including the PDR chair, applicable technical authorities, independent subject matter experts, and other key stakeholders;
3. A summary of the action Items from the review and their closure status/plan;
4. A risk assessment using the PDR risk assessment checklist (Found at Line 834 of the DOD PDR Checklist) or similar, and preliminary Environment, Safety, and Occupational Health hazard lists/assessments to determine readiness to commit to full detail design; and
5. A recommendation from the PDR as to the approval of the program's system allocated baseline to support detail design.

The PDR Report shall be provided to the MDA prior to Milestone B and include recommended technical requirements trades based upon an assessment of cost, schedule, and performance risk.

10.5.4. Post-Preliminary Design Review (Post-PDR) Assessment Decision Review

When the system-level PDR is conducted after Milestone B (for non-MDAPs only), the Program Manager (PM) shall plan and the Milestone Decision Authority (MDA) shall conduct a formal Post-PDR Assessment Decision Review. The MDA shall conduct a formal program assessment and consider the results of the PDR and the PM's assessment in the PDR Report, and determine whether remedial action is necessary to achieve Acquisition Program Baseline objectives. The results of the MDA's Post-PDR Assessment shall be documented in an Acquisition Decision Memorandum. The Post-PDR assessment shall reflect any requirements trades based upon the PM's assessment of cost, schedule, and performance risk.

10.5.5. Post-Critical Design Review (Post-CDR) Assessment

The Milestone Decision Authority (MDA) may assess the programs design maturity and technical risks following the system-level Critical Design Review (CDR) .

1. The Office of the Deputy Assistant Secretary of Defense (Systems Engineering) (DASD(SE)) will participate in CDRs for Major Defense Acquisition Programs (MDAPs) and prepare a brief assessment of design maturity and technical risk which may require MDA attention. Consequently, MDAP Program Managers (PMs) shall be required to invite DASD(SE) engineers to their system-level CDRs and make CDR artifacts available. The draft CDR assessment will be coordinated with the PM prior to forwarding to the MDA.
    1. Unless directed otherwise by their Component MDA, the PMs for non-MDAP programs shall provide a Post-CDR Report to the MDA as that provides an overall assessment of design maturity and a summary of the system-level CDR results which shall include, but not be limited to:
        1. The names, organizations, and areas of expertise of independent subject matter expert participants and CDR chair;
        2. A description of the product baseline for the system and the percentage of build-to packages completed for this baseline;
        3. A summary of the issues and actions identified at the review together with their closure plans;
        4. An assessment of risk by the participants against the exit criteria for the Engineering & Manufacturing Development Phase; and
        5. Identification of those issues/risks that could result in a breach to the program baseline or substantively impact cost, schedule, or performance.
2. All PMs shall continue to document CDRs in accordance with Component best practices.

The CDR risk assessment checklist is designed as a technical review preparation tool, and should be used as the primary guide for assessing risk during the review. This checklist is available on the Systems Engineering Community of Practice.

The MDA shall review the Post-CDR Report (or Assessment for an MDAP) and the PM's resolution/ mitigation plans and determine whether additional action is necessary to satisfy EMD Phase exit criteria and to achieve the program outcomes specified in the APB. The results of the MDA's Post-CDR Assessment Decision Review shall be documented in an ADM staffed by the DAB Executive Secretary.

10.5.6. Independent Program Assessment (IPA)

An IPA in this context is an independent, comprehensive, and systemic review of managerial and technical progress on a major program. IPAs are designed to identify program cost, schedule, and performance risks; formulate risk mitigation plans; and provide feedback both to the Program Manager and the Milestone Decision Authority (MDA).

For space programs, an IPA must be provided to support each milestone, at the Post-System

Design Review Assessment, and at any other time as directed by the MDA. IPAs may also be used to assess other types of programs.

10.5.7. Performance Assessments and Root Cause Analyses (PARCA)

The Director, PARCA (D, PARCA) was established by the Weapon Systems Acquisition Reform Act of 2009 (section 103 of P.L. 111-23,) to conduct and oversee performance assessments and root cause analyses for Major Defense Acquisition Programs (MDAPs). (**Note:** D, PARCA has no program execution responsibility.)

10.5.7.1. Performance Assessments

Per section 103 P.L. 111-23, the Director, Performance Assessments and Root Cause Analyses (D, PARCA) is required to conduct assessments and analyses periodically or when requested by senior Department officials. At a minimum, the D, PARCA must also advise acquisition officials on performance issues regarding an MDAP that may arise:

- Prior to a critical cost breach (aka, Nunn-McCurdy) certification;
- Prior to entry into full-rate production; or
- In the course of consideration of any decision to request authorization of a multiyear procurement contract.

Also, per section 205 P.L. 111-23 , in the case of a program that receives a Nunn-McCurdy certification, the D, PARCA must also assess the program not less often than semi-annually, in the year following a new milestone approval.

The D, PARCAs performance assessments evaluate the cost, schedule, and performance of MDAPs, relative to current metrics, including performance requirements, and baseline parameters. These assessments determine the extent to which the level of program cost, schedule, and performance relative to established metrics is likely to result in the timely delivery of a capability to the warfighter.

10.5.7.2. Root Cause Analyses

Per section 103 P.L. 111-23 , the Director, Performance Assessments and Root Cause Analyses (D, PARCA) is required to conduct Root Cause Analyses (RCAs) for MDAPs to determine the underlying cause or causes for shortcomings in cost, schedule, and performance including the role of unrealistic performance expectations, unrealistic baseline estimates for cost and schedule, immature technologies, unanticipated requirements changes, quantity changes, poor program management, funding instability, or any other matters. The RCAs are used to inform senior Departmental leadership of issues and are included as one-pagers in the Nunn McCurdy certification packages sent to Congress.

10.5.8. Enterprise Risk Assessment Methodology (ERAM)

The Business Capability Lifecycle (BCL) model for Defense Business Systems (DBS) utilizes an

independent risk assessment, known as ERAM, as mandatory input to MS A and B decisions for Major Automated Information Systems (MAIS) DBS.

The ERAM assessment is a collaborative, forward-looking, end-to-end view of internal and external program risk that:

- Provides critical insight to decision makers
- Identifies risks (not issues) and corresponding mitigation strategies, in collaboration with key program personnel
- Focuses on execution and implementation rather than compliance

Additional ERAM assessments may be requested by an Investment Review Board Chair, the DBS Certification Authority, or the Milestone Decision Authority. (The Component Acquisition Executive is responsible for establishing procedures designed to assess risk for DBS that do not meet the MAIS thresholds.)

10.6. Information Sharing and DoD Oversight

10.6.1. Program Information

10.6.2. Life-Cycle Management of Information

10.6.3. Classification and Management of Sensitive Information

10.6.1. Program Information

It is Department of Defense (DoD) policy to keep reporting requirements to a minimum. Nevertheless, complete and current program information is essential to the acquisition process. Consistent with the tables of required regulatory and statutory information in DoD Instruction 5000.02 ; decision authorities require program managers and other participants in the defense acquisition process to present the minimum information necessary to understand program status and make informed decisions. The Milestone Decision Authority tailors program information case-by-case, as necessary. Integrated Product Teams facilitate the management and exchange of program information.

The Program Manager, the DoD Component, or the Office of the Secretary of Defense (OSD) staff prepares most program information. Some information requires approval by an acquisition executive or other senior decision authority. Other information is for consideration only. In most cases, information content and availability are more important than format.

Unless otherwise specified, all plans, waivers, certifications and reports of findings referred to in this Guidebook are exempt from licensing under one or more exemption provisions of DoD 8910.1-M .

10.6.2. Life-Cycle Management of Information

Program Managers (PMs) will comply with recordkeeping responsibilities under the Federal Records Act for the information collected and retained in the form of electronic records (See DoD Directive 5015.2 .). Electronic record-keeping systems should preserve the information submitted, as required by section 3101 of title 44, United States Code and implementing regulations. Electronic record-keeping systems should also provide, wherever appropriate, for the electronic acknowledgment of electronic filings that are successfully submitted. PMs must consider the record-keeping functionality of any systems that store electronic documents and electronic signatures to ensure users have appropriate access to the information and can meet the Agency's record-keeping needs.

10.6.3. Classification and Management of Sensitive Information

Program Managers (PMs) must review their programs to identify and document critical program information (CPI) requiring protection (DoD Instruction 5200.39). (PMs) must also review their programs to identify controlled unclassified information (CUI). CUI includes "FOUO" information as defined in DoD Directive 5230.24 and information with other approved markings requiring dissemination controls that are exempt from mandatory disclosure under the Freedom of Information Act (e.g., DoD 5400.7-R , DoD Directive 5230.25 , and Export Control Act).

When necessary, PMs develop Security Classification Guides in accordance with DoD 5200.1-R.

10.7. Management Control

10.8. Program Plans

10.9. Acquisition Program Baseline (APB)

10.9.1. Acquisition Program Baseline (APB) Approval Process

10.9.1.1. Trade-Offs

10.9.2. Acquisition Program Baseline (APB) Management

10.9.3. Acquisition Program Baseline (APB) Content

10.9.3.1. Acquisition Program Baseline (APB) Cost

10.9.3.2. Acquisition Program Baseline (APB) Schedule

10.9.3.3. Acquisition Program Baseline (APB) Performance

10.9.4. Acquisition Program Baseline (APB) for an Evolutionary Acquisition Program

10.7. Management Control

Program Managers (PMs) will implement internal management controls in accordance with DoD Directive 5000.01 and DoD Instruction 5000.02 . Acquisition Program Baseline (APB) parameters serve as control objectives. Program managers normally identify deviations from approved APB parameters and exit criteria as material weaknesses. PMs must focus on results, in consonance with most efficient and effective processes. PMs must also ensure that obligations and costs comply with applicable law. Further, they must safeguard assets against waste, loss, unauthorized use, and misappropriation; properly record and account for expenditures; maintain accountability over assets; and quickly correct identified weaknesses.

10.8. Program Plans

Program plans describe the detailed activities of the acquisition program. Except as specified by DoD Instruction 5000.02 , the Program Manager (in coordination with the Milestone Decision Authority and Program Executive Officer) should determine the type and number of program plans needed to manage program execution.

10.9. Acquisition Program Baseline (APB)

Department of Defense Instruction (DoDI) 5000.02 requires every Program Manager (PM) to propose and document program goals prior to, and for approval at, program initiation for all Acquisition Category (ACAT) programs. For Major Defense Acquisition Programs (MDAPs), the APB satisfies the requirements in section 2435 of title 10 United States Code and section 2220 of title10 United States Code . DoDI 5000.02 mandates the use of an APB for all other ACAT programs. The APB documents the agreement between the PM, the Program Executive Officer, and the Milestone Decision Authority (MDA) and should reflect the approved program being executed.

A separate APB is required for each increment of an MDAP or MAIS program, and each sub-program of an MDAP. Increments can be used to plan concurrent or sequential efforts to deliver capability more quickly and in line with the technological maturity of each increment. (When an MDAP requires the delivery of two or more categories of end items that differ significantly in form and function, subprograms may be established.)

Program goals consist of an objective value and a threshold value for each Key Performance Parameter and Key System Attribute parameter. Cost, schedule, and performance are intrinsically linked and the objective and threshold values of all program goals should be developed with these relationships in mind. The PM is responsible for managing the trade space between program objectives and thresholds within the bounds of cost, schedule, and performance.

Objective values represent the desired operational goal associated with a performance attribute beyond which any gain in utility does not warrant additional expenditure. Generally, the objective value is an operationally significant increment above the threshold. An objective value may be the same as the threshold when an operationally significant increment above the threshold is not useful.

Thresholds represent the minimum acceptable operational values below which the utility of the system becomes questionable. For performance, a threshold represents either a minimum or maximum acceptable value, while for schedule and cost, thresholds would normally represent maximum allowable values. The failure to attain program thresholds may degrade system performance, delay the program (possibly impacting related programs or systems), or make the program too costly. The failure to attain program thresholds, therefore, places the overall affordability of the program and/or the capability provided by the system into question.

As noted above, each APB parameter must have both an objective and a threshold. For each performance parameter, if no objective is specified, the threshold value will serve as the objective value, and if no threshold is specified, the objective value will serve as the threshold value. For schedule and cost parameters, there are specified default threshold values. The default threshold for schedule is the objective value plus 6 months; the default threshold for cost is the objective value plus 10 percent of the objective value. Despite these guidelines, the PM may propose (with justification) an appropriate threshold value to optimize program trade space, subject to MDA and user approval.

The PM derives the APB from the users' performance requirements, schedule planning and requirements, and best estimates of total program cost consistent with projected funding. The sponsor of a capability needs document (i.e., Capability Development Document or Capability Production Document) provides an objective and a threshold for each attribute that describes an aspect of a system or capability to be developed or acquired. The PM will use this information to develop an optimal product within the available trade space. APB parameter values should represent the program as it is expected to be developed, produced and/or deployed, sustained and funded.

Per section 2435 of title 10 United States Code , the Department of Defense may not obligate funds for Major Defense Acquisition Programs after entry into Engineering and Manufacturing Development without an MDA-approved APB unless the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) specifically approves the obligation. DoD Instruction 5000.02 extends this policy to Major Automated Information System (MAIS) programs.

10.9.1. Acquisition Program Baseline (APB) Approval Process

The Milestone Decision Authority (MDA) is the approval authority for the APB. The APB requires the concurrence of the Program Executive Officer for all Acquisition Category (ACAT) programs, and the concurrence of the DoD Component Acquisition Executive for ACAT ID and IAM programs.

The Program Manager (PM), in coordination with the user/sponsor, prepares the APB for program initiation. The PM can propose a revision of the APB for approval at each major milestone review and as the program enters full rate production/deployment.

The PM may also *propose* , for consideration by the Milestone Decision Authority (MDA), a revision of the APB that reflects the result of a major program restructure that occurs between milestone events and is fully funded. The MDA will decide whether or not to approve such a proposal.

All ACAT ID and IAM program APBs and Joint Requirements Oversight Council Interest program APBs must be submitted to the office of the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L))-specifically the office of the Director, Acquisition Resources and Analysis (ARA)-for action. ARA will coordinate ACAT ID and IAM APBs with the appropriate Department stakeholders, minimally including Defense Acquisition Board principals and advisors, prior to forwarding for MDA approval.

10.9.1.1. Trade-Offs

Maximizing Program Manager (PM) and contractor flexibility to make cost/performance trade-offs is essential to achieving cost objectives. The PM may treat the difference between an objective and its associated threshold as trade space if the combination values lie within the established thresholds and objectives. Additionally, as development trade space is exercised, the impacts between cost, schedule, and performance should be understood and considered so that values remain within their established objectives and thresholds.

The best time to reduce total ownership cost and program schedule is early in the acquisition process. Continuous cost/schedule/performance trade-off analyses can help attain cost and schedule reductions.

Cost, schedule, and performance may be traded within the "trade space" between the objective and the threshold without obtaining Milestone Decision Authority (MDA) approval. Making trade-offs outside the trade space (i.e., decisions that result in acquisition program parameter changes) require approval of both the MDA and the capability needs approval authority. Validated Key Performance Parameters may not be traded-off without approval by the validation authority. The PM and the user should work together on all trade-off decisions.

Configuration Steering Boards (CSBs) are a core part of managing the cost, schedule, and performance trade space for acquisition programs.

10.9.2. Acquisition Program Baseline (APB) Management

The Program Manager (PM) should immediately notify the Milestone Decision Authority (MDA) via a Program Deviation Report when the PM's current estimate exceeds one or more APB threshold value for cost, schedule, and/or performance.

Only the MDA can approve a revision to the APB. Before undertaking revisions to an APB for a

Major Defense Acquisition Program (MDAP), consultation with office of the Under Secretary of Defense for Acquisition, Technology and Logistics (USD(AT&L))-specifically the office of Acquisition Resources and Analysis (ARA)-and the Overarching Integrated Product Team leader is recommended.

For MDAPs, both "original" and current APBs are maintained. The original APB cost estimate may be revised ***only if a breach occurs that exceeds the critical unit cost threshold for the program*** . The "critical" unit cost threshold, as it relates to the original APB, is defined to be an increase of at least 50 percent over the original Program Acquisition Unit Cost (PAUC) or the original Average Procurement Unit Cost (APUC) for the program. The "critical" unit cost threshold, as it relates to the current APB, is defined to be an increase of at least 25 percent over the current PAUC or current APUC for the program.

For MAIS programs, only a current APB is maintained, but the Original Estimate reported in the MAIS Annual Report (MAR) serves a similar purpose as an Original APB Baseline. (The MAR Original Estimate unlike the APB can be revised only after a Critical Change Report has been submitted to Congress. MAIS Critical Change thresholds are: cost parameter (Total Acquisition Cost or Total Lifecycle Cost) 25 percent or greater, schedule parameter of 12 months or greater, or failure to meet a key performance threshold.)

For both MDAP and MAIS programs, the current APB shall be revised at major milestone decisions, and at the full-rate production decision (full deployment decisions for MAIS). Other than these occasions, a revision to the current APB may be considered ***only at the discretion of the MDA*** and only if the revision is a result of a major program restructure that is fully funded and approved by the MDA, or that occurs as a result of a program deviation (breach), that is primarily the result of external causes beyond the control of the PM. A revision to the current APB ***shall not*** be authorized if it is proposed merely to avoid a reportable breach. The determination of whether to revise the APB will be made by the MDA.

For MDAPs, a "critical" unit cost breach triggers the section 2433a of title 10, United States Code (a.k.a "Nunn-McCurdy") certification process. In that case, both the current and original APBs shall be revised to reflect the same new APB values, assuming the program is certified. For MAIS programs, a Critical Change triggers the similar process implementing section 2445c of title 10, United States Code

10.9.3. Acquisition Program Baseline (APB) Content

The APB is a key management document which establishes the approved program's objective and threshold boundaries, and links cost, schedule and performance parameters. The Program Manager (PM) manages the program within that trade space.

10.9.3.1. Acquisition Program Baseline (APB) Cost

Cost figures should reflect realistic cost estimates of the total program and/or increment. Budgeted amounts should equal the total cost objectives in the APB. As the program progresses, the PM can refine procurement costs based on contractor actual (return) costs from Technology

Development, Engineering and Manufacturing Development, and Low-Rate Initial Production.

The cost parameters of Acquisition Category (ACAT) IA programs are the same as those for ACAT I programs as noted in the next paragraph with the addition of Defense Working Capital Funds and Other Funding.

The APB should contain cost parameters (objectives and thresholds) for major elements of program life-cycle costs (or total ownership costs), as defined in Chapter 3 .

These elements include:

1. Research, development, test, and evaluation costs
2. Procurement costs (including the logistics cost elements required to implement the approved sustainment strategy)
3. Military construction costs
4. Operations and maintenance (O&M) costs (that support the production and deployment phase, as well as acquisition-related O&M costs, if any)
5. Total system quantity (to include both fully configured development and production unit's)
6. Program Acquisition Unit Cost defined as the total of all acquisition-related appropriations divided by the total quantity of fully configured end items
7. Average Procurement Unit Cost defined as total procurement cost divided by total procurement quantity (***Note:*** *This item and item 6 above do not usually apply to business information technology systems or other software-intensive systems with no production components* .)
8. Any other cost objectives established by the Milestone Decision Authority (e.g., ownership cost)

The objective parameters for cost are presented in both base-year and then-year dollars. The threshold parameters for cost are only presented in base-year dollars.

10.9.3.2. Acquisition Program Baseline (APB) Schedule

Schedule parameters should include, as a minimum, the projected dates for major decision points (such as Milestone A, Milestone B, Milestone C, Full Rate Production, and the system-level Preliminary Design Review and Critical Design Review), major testing events, and Initial Operational Capability. To be consistent with Chapter 144A of title 10, United States Code , the schedule parameters for Major Automated Information System programs should include: the dates of the Milestone A decision (or MDA approval of the preferred alternative if there was no Milestone A), the objective and threshold dates for Milestone B, Milestone C, Full Deployment Decision, and Full Deployment. If Milestones A, B and/or C are tailored out, the APB shall state the rationale for the tailoring. Full Deployment dates should be identified as TBD until the Full Deployment Decision ADM is signed.

The Full Deployment Decision ADM shall establish the Full Deployment objective and threshold dates, define an identifiable Full Deployment, and designate the acquisition official who will

declare Full Deployment in writing. When Full Deployment is declared, the PM shall notify the MDA.

The PM may propose, and the MDA may approve, other, specific, critical, and system events.

10.9.3.3. Acquisition Program Baseline (APB) Performance

APB performance parameters should include the key performance parameters identified in the capability needs document(s) (i.e., Capability Development Document (CDD) and Capability Production Document (CPD)), and the values and meanings of objectives and thresholds should be consistent between the APB and the capability document. (See also CJCS Instruction 3170.01H) The number and specificity of performance parameters may change over the lifecycle of the acquisition, primarily at major milestones. At Milestone B (Engineering & Manufacturing Development decision), the APB should reflect the defined, operational-level measures of effectiveness or measures of performance to describe needed capabilities, minimally reflecting the CDD. As a program matures, system-level requirements may become better defined. Approaching the MS C decision, the APB should reflect the CPD. The MDA may also add performance parameters to the APB other than the Joint Requirements Oversight Council (JROC)-validated Key Performance Parameters .

OSD staff will review and comment on APBs for ACAT ID and IAM, Special Interest programs, and other programs designated by the Defense Acquisition Executive. The Joint Staff (J-8) will review the cost, schedule, and key performance parameter objective and threshold values in the APB for JROC Interest programs, and any other programs of significant joint interest (as determined by the J-8). The J-8 review will ensure that the objective and threshold values are consistent with the JROC-approved CDD, CPD, and prior JROC decision(s). The review will also ensure that the baseline provides the necessary warfighting capabilities affordably and within required time frames. (See also the CJCS Instruction 3170.01 H and the January 19, 2012 JCIDS Manual .)

10.9.4. Acquisition Program Baseline (APB) for an Evolutionary Acquisition Program

Evolutionary acquisition is a frequently used Department of Defense (DoD) strategy for rapid acquisition of mature technology for the user. An evolutionary approach delivers capability in militarily useful increments, recognizing, up front, the need for future capability improvements.

Programs using an evolutionary acquisition strategy should design the APB consistent with the sponsor's capability document(s) and the applicable example approaches outlined in **Table 10.9.4.T1.**

Table 10.9.4.T1. APB Parameters under an Evolutionary Acquisition Strategy

CDD or CPD	APB
Capability Development Document (CDD) defines multiple increments of capability (CDD should assign each capability to a specific increment)	A separate APB for each increment
A separate CDD for each Increment	A separate APB for each increment
There is one Capability Production Document (CPD) for each production increment	The corresponding APB should be updated to reflect the parameters in the CPD for that production increment

10.9.4.1. Acquisition Program Baseline (APB) for an Increment

DoD Instruction 5000.02 requires the Milestone Decision Authority (MDA) to formally initiate each increment of an evolutionary acquisition program. Program initiation for follow-on increments may occur at Milestone B or C. Therefore, the program manager should develop APB documented goals for each program increment or sub-program. An Increment is a militarily useful and supportable operational capability that can be developed, produced, deployed, and sustained. Each Increment must have an Acquisition Program Baseline (APB) with its own set of threshold and objective values set by the user. (DODI 5000.02, Encl.2, 2.c.) In the context of an IS acquisition, this means that both threshold and objective values for cost, schedule, and performance parameters must be established for each Increment.

10.9.4.2. Acquisition Program Baseline (APB) for a Subprogram

When an MDAP requires the delivery of two or more categories of end items that differ significantly in form and function, subprograms may be established for baseline development and reporting purposes. Section 2430A of title 10, United States Code stipulates that when one subprogram is designated within an MDAP, all remaining elements (increments or components) of the program shall also be appropriately organized into one or more other subprograms.

The decision whether to establish subprograms for an MDAP requires careful analysis and must be made on a case-by-case basis. Structuring an MDAP with subprograms should reflect the way the program is being managed, and represent the most efficient and informative way to convey information about a program to senior defense acquisition officials as well as to the Congress.

The law requires that the congressional defense committees be notified in writing of any proposed subprogram designation not less than 30 days before the date such designation takes effect. The approval of an APB reflecting such designation will be considered the date that subprogram designation takes effect; therefore, notification to Congress must occur not less than 30 days before a subprogram APB is approved. Accordingly, DoD Components must notify the Director, Acquisition Resources and Analysis of all proposed APBs that reflect new or revised subprogram designation at least 60 days before the proposed APB is submitted to the Milestone

Decision Authority for approval.

10.10. Periodic Reports

Periodic reports include only those reports required by statute or the Milestone Decision Authority (MDA). Except for the reports outlined in this section, the MDA tailors the scope and formality of reporting requirements.

10.10.1. Statutory Reporting for Major Defense Acquisition Programs (MDAPs)

10.10.1.1. Revised MDAP Definition

P. L. 111-23, Weapons Systems Acquisition Reform Act of 2009 , May 22, 2009, amended section 2430 of title 10 United States Code , revising the definition of a Major Defense Acquisition Program (MDAP) as follows. A MDAP is a DoD acquisition program that is not a highly sensitive classified program and:

(1) That is designated by the USD(AT&L) as a MDAP; or

(2) That is estimated to require an eventual total expenditure for research, development, test, and evaluation of more than $365 million (based on fiscal year 2000 constant dollars) or an eventual total expenditure for procurement, including all planned increments or spirals, of more than $3.19 billion (based on fiscal year 2000 constant dollars).

For the purposes of establishing a program as an MDAP, the following, as applicable, shall be considered:

(1) The estimated level of resources required to fulfill the relevant joint military requirement as determined by the JROC, pursuant to section 181 of title 10 United States Code;

(2) The cost estimate referenced in section 2366a(a)(4) of title 10 United States Code;

(3) The cost estimate referenced in section 2366b(a)(1)(C) of title 10 United States Code ; and

(4) The cost estimate within a baseline description as required by section 2435 of title 10 United States Code .

10.10.1.2. Designation of Subprograms within Major Defense Acquisition Programs (MDAPs)

The National Defense Authorization Act (NDAA) for FY 2009 amended section 2430 of title 10 United States Code to give the Department authority to designate subprograms within MDAPs.

The Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD(AT&L)) (as delegated by the Secretary of Defense) may designate subprograms within an MDAP. That is, when an MDAP requires the delivery of two or more categories of end items that differ significantly in form and function, subprograms may be established for base-lining and reporting purposes. The law stipulates that when one subprogram is designated within an MDAP, all remaining elements (increments or components) of the program shall also be appropriately organized into one or more subprograms.

In the DoD acquisition environment, there are two primary instances when establishing subprograms within an MDAP may be advisable:

1. The first instance is a product of evolutionary acquisition when increments or blocks of capability are acquired in a sequential manner. With subprogram reporting, each of these increments can be baselined and tracked separately for cost (including unit cost), schedule, and performance purposes within a single MDAP without the risk of artificial cost growth or a critical cost (a.k.a, Nunn-McCurdy) breach occurring when a subsequent increment is initiated. In accordance with DoDI 5000.02, each evolutionary increment must have its own Milestone B (or Milestone C, if initiated at production) and its own Acquisition Program Baseline (APB). The requirement for a separate APB for each evolutionary increment is satisfied through the establishment of an APB containing subprograms. An example of this type of subprogram is the block upgrade of a missile system that provides significant increases in altitude and/or range.
2. The second instance is when there are major components of a program that are dissimilar and therefore cannot be combined in a rational way to produce a unit cost that is representative of the program. An example is the use of separate subprograms for satellites and ground-based receivers to improve visibility and unit cost reporting.

The decision whether to establish subprograms within an MDAP requires careful analysis and must be made on a case-by-case basis. Structuring an MDAP with subprograms should reflect the way the program is being managed, and represent the most efficient and informative way to convey information about a program to senior defense acquisition officials as well as to Congress. For Acquisition Category (ACAT) ID MDAPs, the Defense Acquisition Executive will approve the designation of subprograms based on recommendations from the Overarching Integrated Product Team (OIPT). For ACAT IC MDAPs, the authority to designate subprograms is delegated to the respective DoD Component Milestone Decision Authority (MDA). In either case, the recommendations from the OIPT or the MDAs staff should also include appropriate guidance on how the relevant statutory and regulatory requirements of DoD Instruction 5000.02 should apply at the subprogram or program level (for example, how to structure the acquisition

strategy or the independent cost estimate for a program with designated subprograms).

10.10.1.2.1. Subprogram Notification

The law requires that the Secretary of Defense (as delegated to the Under Secretary of Defense (Acquisition, Technology, and Logistics) must notify the congressional defense committees in writing of any proposed subprogram designation not less than 30 days before the date such designation takes effect. The approval of an Acquisition Program Baseline (APB) reflecting such designation will be considered the date that the subprogram designation takes effect; therefore, notification to Congress must occur not less than 30 days before a subprogram APB is approved.

Accordingly, DoD Components must notify the Director, Acquisition Resources and Analysis of all proposed APBs that reflect new or revised subprogram designations at least 60 days before the proposed APB is submitted to the Milestone Decision Authority for approval. Once a subprogram structure is established for a Major Defense Acquisition Program, the Defense Acquisition Executive Summary , Selected Acquisition Report, and Unit Cost Reports (quarterly and breach) will reflect that subprogram structure.

10.10.1.2.2. Subprogram Critical Cost Growth

In the event a subprogram experiences critical unit cost growth, the certification required for the program to continue shall be made at the program level-not the subprogram level.

10.10.1.2.3. Prohibition on Obligations (Subprograms)

The prohibition on obligations until the submission of the Selected Acquisition Report (SAR) for significant breaches, and the certification for critical breaches, will affect all major contracts of the program, not just those relating to the subprogram that breached.

10.10.1.3. Acquisition Program Baseline (APB) Reporting

10.10.1.3.1. Program Deviations

The Program Manager (PM) must maintain a current estimate of the program being executed (see definition of "current estimate" in section 10.10.1.3.2). The PM must immediately notify the Milestone Decision Authority when a baseline deviation occurs based upon the current estimate. A baseline deviation occurs when the current estimate is greater than the threshold. (See section 2433 of title 10 United States Code)

10.10.1.3.2. Current Estimate

The current estimate is the latest estimate of program acquisition cost and quantity, schedule milestone dates, performance characteristic values, and critical technical parameters of the approved program (i.e., the approved program as reflected in the currently approved Acquisition Program Baseline (APB), Acquisition Decision Memorandum, or in any other document containing a more current decision of the Milestone Decision Authority (MDA) or other

approval authority). For cost, the current estimate is normally the President's Budget plus or minus known changes; for schedule, it is normally the program manager's best estimate of current schedule milestone dates; for performance it is normally the program's manager's best estimate of current performance characteristics values.

Program Managers (PMs) will report the current estimate of each APB parameter periodically to the MDA. PMs will report current estimates for ACAT I and IA programs quarterly in the Defense Acquisition Executive Summary. For all other programs, the cognizant MDA will direct the reporting frequency.

10.10.1.3.3. Program Deviation Reporting

When the Program Manager (PM) has reason to believe that the current estimate for the program indicates that a performance, schedule, or cost threshold value will not be achieved, he or she will immediately notify the Milestone Decision Authority (MDA) of the deviation. Within 30 days of the occurrence of the program deviation, the PM will submit a Program Deviation Report to the MDA providing the reasons for the program deviation and a recommendation for the actions that need to be taken to bring the program back within the baseline parameters (if this information was not included with the original notification). Within 90 d days of the occurrence of the program deviation, one of the following should have occurred: the program is back within Acquisition Program Baseline (APB) parameters; or an OIPT-level or equivalent Component-level review has been conducted to review the program and make recommendations to the MDA regarding the parameters that were breached. The MDA will decide, based on criteria in sections 2433 and 2435 of title 10 United States Code, whether it is appropriate to approve a revision to the APB. (Generally, APB changes will only be approved in conjunction with a major milestone decision or as a result of a critical cost (a.k.a. Nunn-McCurdy) breach. In limited circumstances, the MDA may choose to approve a change to the current APB as a result of a major program restructure that is fully funded, or as a result of a program deviation--if the breach is primarily the result of external causes beyond the Program Managers control. A revision to the current APB ***will not*** be authorized if it is proposed merely to avoid a reportable breach.

If one of the above actions has not occurred within 90 days of the program deviation, the MDA should hold a formal program review to determine program status and the way ahead.

10.10.1.4. Selected Acquisition Report (SAR) Requirement

In accordance with section 2432 of tile 10, United States Code , the Secretary of Defense (as delegated to the Under Secretary of Defense (Acquisition, Technology, and Logistics shall submit a SAR to Congress for all Major Defense Acquisition Programs (MDAPs). The Program Manager will use the Defense Acquisition Management Information Retrieval system SAR module application to prepare the SAR.

10.10.1.4.1. Selected Acquisition Report (SAR) Content and Submission

A SAR provides Congress with the status of total program cost, schedule, and performance, as well as program unit cost and unit cost breach information for a specific program. Each SAR will

also include a full life-cycle cost analysis for the reporting program, each of its evolutionary increments, as available, and for its antecedent program, if applicable. Required content for a SAR is defined in section 2432 of title 10 United States Code and is reflected in the SAR module of the Defense Acquisition Management Information System by which the SAR information is entered and submitted electronically.

The SAR for the quarter ending December 31 is the annual SAR. The Program Manager (PM) will submit the annual SAR within 45 days after the President transmits the following fiscal year's budget to Congress. Annual SARs will reflect the President's Budget and supporting documentation. The annual SAR is mandatory for all ACAT I programs.

The PM will submit quarterly exception SARs for the quarters ending March 31, June 30, and September 30 not later than 45 days after the quarter ends. Quarterly SARs are reported on an exception basis, as follows:

- The current estimate exceeds the Program Acquisition Unit Cost (PAUC) objective or the Average Procurement Unit Cost (APUC) objective of the currently approved Acquisition Program Baseline (APB) in base-year dollars by 15 percent or more;
- The current estimate exceeds the PAUC or APUC objective of the original APB in base-year dollars by 30 percent or more.
- The current estimate includes a 6-month, or greater, delay for any schedule parameter that occurred since the current estimate reported in the previous SAR;
- Milestone B or Milestone C approval occurs within the reportable quarter.

Quarterly exception SARs will report the current estimate of the program for cost, schedule, and performance (see definition of current estimate in section 10.10.1.3.2. above). Pre-Milestone B programs may submit Research, Development, Test, and Evaluation (RDT&E)-only reports, excluding procurement, military construction, and acquisition-related operations and maintenance costs. Department of Defense Components must notify the Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD(AT&L)) of the names of the programs for which they intend to submit RDT&E-only SARs 30 days before the reporting quarter ends. The USD(AT&L) must also notify Congress 15 days before the reports are due.

Whenever the USD(AT&L) proposes changes to the content of a SAR, he or she must submit notice of the proposed changes to the Armed Services Committees of the Senate and House of Representatives. The USD(AT&L) may consider the changes approved, and incorporate them into the SAR, 60 days after the committees receive the change notice.

Per section 2433(c)(2) of title10, United States Code , for any Major Defense Acquisition Program (MDAP) certified subsequent to a critical cost breach, the first SAR for the program submitted after the President submits a budget in the calendar year following the year in which the program was restructured must include a description of all funding changes made as a result of the growth in cost of the program, including reductions made in funding for other programs to accommodate such cost growth.

Per section 2366b of title 10, United States Code , the SAR for any MDAP receiving a waiver for

one or more Milestone (MS) B certification criteria must prominently and clearly indicate that such program has not fully satisfied the certification requirements for MS B, until such time that the Milestone Decision Authority makes a determination that the program has satisfied all such certification requirements.

10.10.1.4.2. Selected Acquisition Report (SAR) Waivers

In accordance with section 2432 of title 10, United States Code , the Secretary of Defense may waive the requirement for submission of a SAR for a program for a fiscal year if:

- The program has not entered Engineering and Manufacturing Development;
- A reasonable cost estimate has not been established for the program; and,
- The system configuration for the program is not well defined.

As delegated by the Secretary of Defense, the Under Secretary of Defense (Acquisition, Technology, and Logistics) will submit a written notification of each waiver for a fiscal year to the Armed Services Committees of the Senate and House of Representatives not later than 60 days before the President submits the budget to Congress, pursuant to section 1105 of title 31, United States Code in that fiscal year.

10.10.1.4.3. Selection Acquisition Report (SAR) Termination

The Under Secretary of Defense (Acquisition, Technology, and Logistics) will consider terminating reporting of SAR data when 90 percent of expected production deliveries or planned acquisition expenditures have been made, or when the program is no longer considered an ACAT I program in accordance with section 2432 of tile 10, United States Code .

10.10.1.5. Unit Cost Reports (UCR)

In accordance with section 2433 of title 10, United States Code , the Program Manager will prepare UCRs for all ACAT I programs submitting Selected Acquisition Reports, except pre-Milestone B programs that are reporting Research, Development, Test & Evaluation costs only.

10.10.1.5.1. Unit Cost Report (UCR) Content and Submission

The Program Manager (PM) will report the unit costs of the program to the Component Acquisition Executive on a quarterly basis through the electronic Defense Acquisition Executive Summary (DAES) submission process. The PM will submit the update in accordance with DAES submission procedures. Reporting will begin with submission of the initial Selected Acquisition Report (SAR), and terminate with submission of the final SAR. Content of the unit cost report is specified in section 2433 of title 10, United States Code.

Each report will include:

1. The program acquisition unit cost for the program (or for each designated major subprogram under the program).

2. In the case of a procurement program, the current estimate of the Program Acquisition Unit Cost and the Average Procurement Unit Cost (in base-year dollars) for the program (or for each designated major subprogram under the program);
3. Any earned value management cost and schedule variances, for each of the major contracts since entering the contract;
4. Any changes from program schedule milestones or program performances reflected in the baseline description established under section 2435 of title 10, United States Code that are known, expected, or anticipated by the program manager.
5. Any significant changes in the total program cost for development and procurement of the software component of the program or subprogram, schedule milestones for the software component of the program or subprogram, or expected performance for the software component of the program or subprogram that are known, expected, or anticipated by the program manager.

10.10.1.5.1.1. Unit Cost Reporting (UCR) for the Software Component of a Major Defense Acquisition Program (MDAP)

Section 2433(b)(5) of title 10, United States Code requires reporting of any significant changes in the total program cost for development and procurement of the software component of the program or subprogram, schedule milestones for the software component of the program or subprogram, or expected performance for the software component of the program or subprogram that are known, expected, or anticipated by the program manager.

This is essentially a requirement to separately establish a cost and schedule baseline for the software component of a MDAP program or subprogram. However the definition of software component is not defined in the statute. Therefore, in the context of unit cost reporting, the definition of software development element for the Software Resources Data Report (SRDR) (see DoDI 5000.02, Enclosure 4, Table 4 Regulatory Contract Reporting Requirements) is used as the proxy for software component referenced in the statute. (Reporting of software efforts above $20M is required for the purposes of SRDRs as defined in DoD 5000.04-M-1 .)

Under this reporting framework, the Initial Government Report (IGR) and/or the contractors Initial Developer Report (IDR) should be used as the baselines to develop a cost and schedule software component estimate. (The IGR and IDR are established within 120 days of the contract award, or within 60 days of beginning a software release, and are updated at the completion of a software increment to reflect the actual resources incurred). Note that the SRDR includes only software resource requirements (staffing and schedule), not cost explicitly. However, PMs can, and should, use these parameters to compute a cost estimate.

The PMs software component estimate must be documented in the Acquisition Program Baseline and used as the basis for determining whether there are any significant changes in the total program cost for development and procurement of the software component of the program or subprogram, schedule milestones for the software component of the program or subprogram, or expected performance for the software component of the program or subprogram that are known, expected, or anticipated by the program manager. Any such changes must be addressed in the

UCR.

Any PM with an APB for an MDAP (or it's subprogram) that does not currently include a software component estimate must complete the estimate and report it in the unit cost portion of the next program (or subprogram) SAR. A footnote must be included to indicate that this estimate will be the baseline against which future change in the software component cost will be compared.

10.10.1.5.2. Unit Cost Report (UCR) Breach Reporting

If the program manager of a major defense acquisition program determines at any time during a quarter that there is reasonable cause to believe that the Program Acquisition Unit Cost for the program (or for a designated major subprogram under the program) or the Average Procurement Unit Cost for the program (or for such a subprogram), as applicable, has increased by a percentage equal to or greater than the significant cost growth threshold or the critical cost growth threshold, the breach must be reported in accordance with section 2433 of title 10 United States Code .

When one or more problems with the software component of the Major Acquisition Defense Program, or any designated major subprogram under the program, has significantly contributed to the increase in program unit costs, the action taken and proposed to be taken to solve such problems must also be included in the Selected Acquisition Report (SAR). The only exception to that requirement occurs when a program acquisition unit cost increase or a procurement unit cost increase for a major defense acquisition program or designated major subprogram results in a termination or cancellation of the entire program or subprogram.

10.10.1.5.2.1. Significant Cost Growth Notification Requirements

The Program Manager will notify the Component Acquisition Executive (CAE) immediately, whenever there is a reasonable cause to believe that the current estimate of either the Program Acquisition Unit Cost (PAUC) or Average Procurement Unit Cost (APUC) (in base-year dollars) of a Major Defense Acquisition Program, or designated subprogram, has increased by at least 15 percent over the PAUC or APUC objective of the currently approved Acquisition Program Baseline (APB), respectively, or has increased by at least 30 percent over the PAUC or APUC of the original/revised original APB.

If the CAE determines that there is an increase in the current estimate of the PAUC or APUC objective of at least 15 percent over the currently approved APB, or an increase of at least 30 percent over the original APB, the CAE, based on the PMs notification, shall inform the cognizant Head of the DoD Component of this determination. If the cognizant Head of the DoD Component subsequently determines that there is, in fact, an increase in the current estimate of the PAUC or APUC of at least 15 percent over the currently approved APB, or an increase in the current estimate of the PAUC or APUC of at least 30 percent over the original APB, the Head of the DoD Component will notify Congress, in writing, of the determination of a significant cost breach. The notification will be made not later than 45 days after the end of the quarter, in the case of a quarterly report; or not later than 45 days after the date of the report, in the case of a

report based on reasonable cause. In either case, notification will include the date that the Head of the DoD Component made the determination. In addition, the Head of the DoD Component will submit a Selected Acquisition Report (SAR) for either the fiscal year quarter ending on or after the determination date, or for the fiscal year quarter that immediately precedes the fiscal year quarter ending on or after the determination date. This SAR shall contain the additional, breach-related information.

The cognizant Head of the DoD Component shall also inform the Under Secretary of Defense (Acquisition, Technology, and Logistics) of the significant cost breach determination not later than five working days prior to submitting the congressional notification.

10.10.1.5.2.2. Critical Cost Breach Certification Requirements

Per section 2433a of title 10 United States Code , the Program Manager shall notify the Department of Defense Component Acquisition Executive (CAE) immediately, whenever there is a reasonable cause to believe that the current estimate of either the Program Acquisition Unit Cost (PAUC) or Average Procurement Unit Cost (APUC) objective of a Major Defense Acquisition Program (MDAP),, or designated subprogram (in base-year dollars) has increased by at least 25 percent over the PAUC or APUC objective of the currently approved Acquisition Program Baseline (APB) estimate, or at least 50 percent over the PAUC or APUC objective of the original/revised original APB (aka Nunn-McCurdy breach).

If the CAE determines that there is an increase in the current estimate of the PAUC or APUC objective of at least 25 percent over the currently approved APB, or an increase in the current estimate of PAUC or APUC objective of at least 50 percent over the original APB, the CAE, based upon the PMs notification shall inform the cognizant Head of the DoD Component of this determination. If the cognizant Head of the DoD Component subsequently determines that there is, in fact, an increase in the current estimate of the PAUC or APUC of at least 25 percent over the currently approved APB, or an increase in the PAUC or APUC of at least 50 percent over the original APB, the Head of the DoD Component shall notify Congress, in writing, of the determination of a critical cost breach. The notification shall be not later than 45 days after the end of the quarter, in the case of a quarterly report; or not later than 45 days after the date of the report, in the case of a report based on reasonable cause. In either case, notification shall include the date that the Head of the DoD Component made the determination. In addition, the Head of the DoD Component shall submit a Selected Acquisition Report (SAR) for either the fiscal year quarter ending on or after the determination date, or for the fiscal year quarter that immediately precedes the fiscal year quarter ending on or after the determination date. This SAR shall contain the additional critical cost breach-related information.

The cognizant Head of the DoD Component shall also inform the Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD(AT&L)) of the critical cost breach determination not later than five working days prior to submitting the congressional notification.

Per section 2433a of title 10, United States Code the USD(AT&L), after consultation with the Joint Requirements Oversight Council regarding program requirements, shall determine the root cause or causes of the critical cost growth in accordance with applicable statutory requirements

and DoD policies, procedures, and guidance based upon the root cause analysis conducted by the Director, Performance Assessments and Root Cause Analyses (DPARCA); and in consultation with the Director, Cost Assessment and Program Evaluation (DCAPE), shall carry out an assessment of:

1. The projected cost of completing the program if current requirements are not modified;
2. The projected cost of completing the program based on reasonable modification of such requirements;
3. The rough order of magnitude of the costs of any reasonable alternative system or capability; and
4. The need to reduce funding for other programs due to the growth in cost of the program.

After conducting the reassessment, the USD(AT&L) shall terminate the program unless the USD(AT&L) submits a written certification to Congress before the end of the 60-day period beginning on the day the SAR containing the unit cost information is required to be submitted to Congress. The certification must state:

1. The continuation of the program is essential to the national security;
2. There are no alternatives to the program that will provide acceptable capability to meet the joint military requirement (as defined in section 181 of title 10, United States Code) at less cost.
3. The new estimates of the PAUC or APUC have been determined by the DCAPE, to be reasonable;
4. The program is a higher priority than programs whose funding must be reduced to accommodate the growth in cost of the program; and
5. The management structure for the program is adequate to manage and control PAUC or APUC.

The written certification shall be accompanied by a report presenting the root cause analysis and assessment and the basis for each determination made in accordance with the five certification criteria listed above together with supporting documentation.

If the USD(AT&L) elects not to terminate a MDAP that has experienced critical cost growth, the USD(AT&L) shall:

1. Restructure the program in a manner that addresses the root cause or causes of the critical cost growth, as identified by the actions described above, and ensure that the program has an appropriate management structure as set forth in the written certification;
2. Rescind the most recent milestone approval for the program or designated subprograms and withdraw any associated certification(s) pursuant to section 2366a or 2366b of title 10, United States Code;
3. Require a new milestone approval for the program or designated subprograms before taking any contract action to enter a new contract, exercise an option under an existing contract, or otherwise extend the scope of an existing contract under the program, except to the extent determined necessary by the MDA, on a non-delegable basis, to ensure that the program can be restructured as intended by the Secretary of Defense without

unnecessarily wasting resources.; and
4. Include in the report a description of all funding changes made as a result of the growth in cost of the program, including reductions made in funding for other programs to accommodate such cost growth. (The report specified here is the first SAR for the program submitted after the President submits a budget in the calendar year following the year in which the program was restructured.)

If, subsequent to a critical breach and based on a cost assessment and root cause analysis, the MDA determines that after eliminating the cost increase attributed to a quantity change the remaining increase to the PAUC is 5 percent or less to the current baseline and 10% or less to the original baseline, the following two requirements from section 2433a of title 10, United States Code may be waived:

1. Requirement to rescind the program's most recent milestone approval and associated MDA Milestone Certification Memorandum,
2. Requirement for a new milestone approval prior to contract actions.

This waiver is only applicable if the change in quantity was not made as a result of an increase in program cost, a delay in the program, or a problem meeting program requirements.

Additionally, for each MDAP that has exceeded the critical unit cost thresholds, but has not been terminated, the DPARCA shall conduct semi-annual reviews until 1 year after the date a new milestone approval is received. The DPARCA shall report the results of the semi-annual reviews to the USD(AT&L) and summarize the results in the Director's next annual report.

If an MDAP is terminated after experiencing a critical unit cost breach, the USD(AT&L) shall submit to Congress a written report with the following information:

1. An explanation of the reasons for terminating the program;
2. The alternatives considered to address any problems in the program; and
3. The course the Department of Defense plans to pursue to meet any continuing joint military requirements otherwise intended to be met by the program.

10.10.1.5.2.3. Restriction on Obligation of Funds

If the Head of the DoD Component makes a determination of either a Program Acquisition Unit Cost (PAUC) or Average Procurement Unit Cost (APUC) increase of at least 15 percent over the current Acquisition Program baseline (APB) or an increase of at least 30 percent over the original/revised original APB and a Selected Acquisition Report (SAR) containing the additional unit cost breach information is not submitted to Congress as required, or if the Head of the DoD Component makes a determination of either a PAUC or APUC increase of at least 25 percent over the current APB or at least 50 percent over the original/revised APB and a SAR containing the additional unit cost breach information and a certification by the USD(AT&L) is not submitted to Congress as required, funds appropriated for Research, Development, Test & Evaluation, procurement, or military construction may not be obligated for a major contract

under the program.

A critical cost breach to the PAUC or APUC that results from the termination or cancellation of an entire program will not require a critical cost breach certification by the USD(AT&L).

10.10.1.6. Reporting Breaches of Milestone A Cost Estimates and Initial Operational Capability (IOC) Objectives

Section 2366a of title 10, United States Code requires the Milestone Decision Authority (MDA) to certify that a cost estimate for the program has been submitted, with the concurrence of the Director of Cost and Program Evaluation, and that the level of resources required to develop and procure the program is consistent with the priority level assigned by the Joint Requirements Oversight Council (JROC).

Section 2366a also requires the Program Manager (PM) to notify the MDA if:

- The projected cost of the certified program, at any time before Milestone B, exceeds the cost estimate submitted at the time of certification by at least 25% or
- The time period required for delivery of an IOC exceeds the schedule objective established in accordance with section 181(b)(5) of title 10, United States Code by more than 25%.

The MDA, in consultation with the JROC, must then determine whether the level of resources required to develop and procure the program remains consistent with the priority assigned by the JROC. The MDA may withdraw the MS A certification or rescind the MS A approval if the MDA determines that such action is in the interest of national defense.

Not later than 30 days after the PM submits a notification to the MDA, the MDA must submit a report to the congressional defense committees that:

- Identifies the root cause(s) of the cost or schedule growth;
- Identifies appropriate acquisition performance measures for the remainder of the development of the program; and
- Includes one of the following:
    - A written certification (with a supporting explanation) stating that-
        - the program is essential to national security;
        - there are no alternatives to the program that will provide acceptable military capability at less cost;
        - new estimates of the development cost or schedule, as appropriate, are reasonable; and
        - the management structure for the program is adequate to manage and control program development cost and schedule.
    - A plan for terminating the development of the program or withdrawal of Milestone A approval, if the Milestone Decision Authority determines that such action is in the interest of national defense.

10.10.1.7. Reporting Status of Milestone A Cost Estimates and Initial Operational Capability (IOC) Objectives

For programs that are expected to be Major Defense Acquisition Programs, the Office of the Under Secretary of Defense for Acquisition Technology and Logistics (OUSD(AT&L) will ensure that the program cost estimate and the IOC objective are documented in the Milestone A Acquisition Decision Memorandum (ADM).

Program Managers are required to submit current program status with respect to the original cost estimate and IOC objective as captured in the MS A ADM on a quarterly basis via the Defense Acquisition Executive Summary tool in the Defense Acquisition Information Management Retrieval System. Reporting will begin in the first quarter following the Milestone A decision approval and will continue until Milestone B approval is granted for the program.

10.11. Major Automated Information System (MAIS) Statutory Reporting

10.11.1. Major Automated Information System (MAIS) Programs Required to Report

10.11.1.1. Major Automated Information System (MAIS) Programs versus Increments

10.11.1.2. Major Automated Information System (MAIS) Programs

10.11.1.3. Pre-Major Automated Information System (Pre-MAIS (now "Unbaselined MAIS"))Programs and Other Investments

10.11.1.4. Major Automated Information System (MAIS)/Major Defense Acquisition Program (MDAP) Section 817 Determination

10.11.1.5. Ending the Requirement to Report under Chapter 144A of title 10 United States Code; Close-out Reports

10.11.2. Major Automated Information System (MAIS) Annual Report (MAR)

10.11.2.1. Preparing the Major Automated Information System (MAIS) Annual Report (MAR)

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10.11.3. Major Automated Information System (MAIS) Quarterly Report (MQR)

10.11.3.1. Reporting Cycle: Major Automated Information System (MAIS) Quarterly Report (MQR)

10.11.3.2. Major Automated Information System (MAIS) Quarterly Report (MQR) Form

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10.11.3.3. Program Manager's Current Estimate

10.11.3.4. Major Automated Information System (MAIS) Quarterly Report (MQR) Anticipation and Receipt

10.11.3.5. Determinations on the (MAIS) Quarterly Report (MQR) by the Senior Official

10.11. Major Automated Information System (MAIS) Statutory Reporting

The FY07 National Defense Authorization Act (NDAA), Section 816, instituted a reporting regime requiring MAIS programs to submit annual and quarterly reports. This was codified in Chapter 144A of title 10, United States Code and has been amended several times.

Briefly, the statute defines dollar thresholds for Major Automated Information System (MAIS) programs and other investments required to report . A MAIS Annual Report (MAR) is due to Congress 45 days after submission of the President's Budget, and each quarter a MAIS Quarterly Report (MQR) is due to "a senior Department of Defense official responsible for a MAIS program," hereafter referred to as the Senior Official.

The Senior Official responsible for a program is:

- The Service Acquisition Executive (SAE) for a program acquired by a Military Department (Army, Navy, or Air Force).
- The Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD(AT&L)) for a program acquired by a DoD Component.

The statute also describes reports that are due to the congressional defense committees if a Program Manager (PM) estimates a Significant or Critical Change and the Senior Official agrees. As shown in table 10.11.T1, below, Significant and Critical Changes can occur in performance, schedule, and/or cost.

Table 10.11.T1. Significant and Critical Changes

	Significant	Critical
Cost - total acquisition - total life-cycle	15-25% increase	25% increase
Schedule	>6 month - 1 year delay	1 year delay

	[redacted]	Failed to achieve FDD within 5 years after the MS A decision or the date when the preferred alternative was selected and approved by the MDA. (See 10.11.5.2)
Performance	Significant adverse change in expected performance.	Undermines the ability of the system to perform mission as originally intended (i.e., did not meet a KPP threshold)
Report to congressional defense committees	Notification due 45 days after the MQR was due in the office of Senior Official	Program Evaluation and Report due 60 days after the MQR was due in the office of Senior Official

If a Significant Change to a program is determined by the Senior Official, the requirement to send the congressional defense committees a Notification within 45 days is triggered. Determination of a Critical Change , however, will initiate the requirement to conduct an Evaluation of the program and send a Report (with certifications) to Congress within 60 days. If the Report is not submitted within the 60-day period, appropriated funds may not be obligated for any major contract under the program. This prohibition ends on the day on which the congressional defense committees receive a report in compliance with the statute.

For additional information please see the Chapter 144A Key Documents and References. A complete copy of this DAG implementation guidance is also available there.

10.11.1. Major Automated Information System (MAIS) Programs Required to Report

Chapter 144A of title 10 United States Code requires annual and quarterly reports for each MAIS program and each other major information technology investment program for which funds are requested by the President in the budget.

10.11.1.1. Major Automated Information System (MAIS) Programs versus Increments

In the Defense acquisition context the terms "Program" and "Increment" refer to the management structure of the acquisition effort. Information System (IS) acquisitions require a short cycle time, so the Increment has become the basic unit for management of an Information System (IS) acquisition.

Increment -the Increment is "a militarily useful and supportable operational capability that can be developed, produced, deployed, and sustained. Each Increment must have an Acquisition Program Baseline (APB) with its own set of threshold and objective values set by the user." (DODI 5000.02, Encl.2, 2.c.) In the context of an IS acquisition, this means that both threshold and objective values for cost, schedule, and performance parameters must be established for each Increment.

Program -the term "Program" in the IS context will refer to the summation of a succession of Increments, and is a consolidation of acquisition efforts that is useful for Planning, Programming, Budgeting, and Execution System purposes. An IS "Program" does not have its own APB, rather each "Program" Increment has its own APB and is a separate acquisition program (as defined in DoDD 5000.01).

For a more complete discussion of Programs and Increments, see the AIS Acquisition Terms of Reference and Definitions .

10.11.1.2. Major Automated Information System (MAIS) Programs

A MAIS Program is defined in Chapter 144A of title 10 United States Code as "a Department of Defense acquisition program for an Automated Information System (either as a product or a service) that is either:

- "Designated by the Milestone Decision Authority (MDA) as a MAIS; or
- Estimated to exceed [one of the MAIS dollar thresholds]."

The MAIS threshold definition is statutory (per title 10 U.S.C. Chapter 144A) and explained in Table 1 of DoD Instruction 5000.02 :

- $32 million in fiscal year (FY) 2000 constant dollars for all expenditures, for all increments, regardless of the appropriation or fund source, directly related to the AIS definition, design, development, and deployment, and incurred in any single fiscal year; or
- $126 million in FY 2000 constant dollars for all expenditures, for all increments, regardless of the appropriation or fund source, directly related to the AIS definition, design, development, and deployment, and incurred from the beginning of the Materiel Solution Analysis Phase through deployment at all sites; or
- $378 million in FY 2000 constant dollars for all expenditures, for all increments, regardless of the appropriation or fund source, directly related to the AIS definition, design, development, deployment, operations and maintenance, and incurred from the beginning of the Materiel Solution Analysis Phase through sustainment for the estimated useful life of the system.

As a footnote to Table 1, AIS is defined as "a system of computer hardware, computer software, data or telecommunications that performs functions such as collecting, processing, storing, transmitting, and displaying information. Excluded are computer resources, both hardware and software, that are:

- an integral part of a weapon or weapon system;
- used for highly sensitive classified programs (as determined by the Secretary of Defense);
- used for other highly sensitive information technology programs (as determined by the DoD Chief Information Officer); or
- determined by the USD(AT&L) or designee to be better overseen as a non-AIS program (e.g., a program with a low ratio of RDT&E funding to total program acquisition costs or

that requires significant hardware development)."

10.11.1.3. Pre-Major Automated Information System (Pre-MAIS (now "Unbaselined MAIS")) Programs and Other Investments

Chapter 144A of title 10 United States Code extends coverage of the reporting requirements to pre-MAIS Programs and other investments in Automated Information System (AIS).

- A Pre-MAIS program is defined as "an investment that is designated by the Secretary of Defense, or a designee of the Secretary, as a pre-Major Automated Information System' or 'pre-MAIS' program." Pre-MAIS designations are made by the Under Secretary of Defense (Acquisition, Technology, and Logistics (USD(AT&L)). The Department will also consider that an "investment" exists at Milestone A or when the preferred alternative is approved by the Milestone Decision Authority. Despite historic and statutory references to "pre-MAIS," the acquisition community prefers the term "unbaselined MAIS" as it is more descriptive of the programs acquisition status. Chapter 144A requirements will apply, whether the statutory or preferred term is used. See the AIS Acquisition Terms of Reference and Definitions .
- The reporting requirements also apply to "any other investment in [AIS] products or services that is expected to exceed the [MAIS thresholds] but is not considered to be a [MAIS] program because a formal acquisition decision has not yet been made with respect to such investment."

10.11.1.4. Major Automated Information System (MAIS)/Major Defense Acquisition Program (MDAP) Section 817 Determination

Section 817 of the Fiscal Year 2010 National Defense Authorization Act amended Section 2445d of title 10 U.S.C . giving the Secretary of Defense authority to designate a program that both meets the definition of a MAIS and meets or exceeds the cost threshold for an MDAP, to be treated only as a MAIS or only as an MDAP.

Section 817 provides that as a general rule:

- A program that requires the development of customized hardware shall be treated only as an MDAP under chapter 144 of title 10 United States Code , and
- A program that does not require the development of customized hardware shall be treated only as a MAIS program under chapter 144A of title 10 United States Code.

While these criteria will be employed as a general rule, other factors will also be considered in determining whether to designate a program a MAIS or an MDAP, and will be applied on a case-by-case basis.

10.11.1.5. Ending the Requirement to Report under Chapter 144A of title 10 United States Code ; Close-out Reports

Many reasons exist to suggest the need for a program to report under Chapter 144A should not

arise or has come to an end. The Under Secretary of Defense (Acquisition, Technology, and Logistics) or his designee will make this determination based on consideration of the facts, including:

- The program does not or no longer meets the definitions presented above in 10.11.1.2 ;
- The program has been terminated*; or
- The program has achieved full deployment (FD)**.

For programs determined to no longer require Chapter 144A reporting, a "close-out" Major Automated Information System (MAIS) Annual Report must be completed and submitted to Congress during the next reporting cycle. Similarly, a "close-out" MAIS Quarterly Report must be completed and submitted to the Senior Official when it is next due. Close-out reports should articulate one of the three circumstances above and cite an existing authoritative document (signed by an appropriate authority) as support. If subsequent increments of a program survive, note their existence in the Program Description of close-out reports.

NOTES:

* Terminating an Increment does not cause a Critical Change to be determined. Programs being terminated, however, must comply with Section 806 of P.L. 109-163 (FY06 NDAA). This statute requires the Secretary of Defense to notify the congressional defense committees not less than 60 days before cancelling (or significantly reducing the scope of) a MAIS program that is already post-Milestone C or has been fielded.

** Full Deployment is achieved according to the terms of an Acquisition Decision Memorandum (ADM) which documents a Full Deployment Decision (FDD). The FDD ADM should:

- Define FD in sufficient detail so that it can be reasonably determined when FD has occurred.
- Define FD Objective and Threshold dates. Following the FDD ADM approval, the Program Manager should submit a new Original Estimate using the Defense Acquisition Management Information Retrieval tool updating ONLY the FD TBD date with the FD Objective date from the ADM. (See page 21 of the DAMIR MAR Users Guide for instructions to update the FD Date.)
- Identify the acquisition organization that is responsible to declare (in writing) when FD has occurred.

10.11.2. Major Automated Information System (MAIS) Annual Report (MAR)

Chapter 144A of title 10 United States Code requires the Secretary of Defense to "submit to Congress each calendar year, not later than 45 days after the President submits to Congress the budget justification documents regarding cost, schedule and performance for each [Program Required to Report] for which funds are requested by the President in the budget." DoD meets this requirement by preparing for each program a report called the MAIS Annual Report (MAR). The MAR should be unclassified. If the required information is classified, then the classified data

is replaced with the word "CLASSIFIED."

10.11.2.1. Preparing the Major Automated Information System (MAIS) Annual Report (MAR)

The MAR is prepared using the Defense Acquisition Management Information Retrieval (DAMIR) tool. A separate MAR for each Increment is prepared by the Program Manager and consists of the following sections: Program Information, Points of Contact, Program Description, Business Case, Program Status, Schedule, Performance Characteristics, and Cost. Do not report Increments that have submitted a close-out MAR. The DAMIR MAR Users Guide explain how to prepare the report.

10.11.2.2. Submitting the Major Automated Information System (MAIS) Annual Report (MAR)

Program Managers should submit the MAR via the Defense Acquisition Management Information Retrieval (DAMIR) tool to the DoD Component Acquisition Executive (CAE) (or equivalent official). The CAE's designated representative will then release the unclassified reports through the established DAMIR hierarchy.

Components will submit Final Draft reports as detailed above for Office of Secretary of Defense (OSD)-level review and coordination by the second Friday of January each year. The Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics) (OUSD(AT&L)) will coordinate the OSD-level review and provide feedback to the Components through issue resolution teleconferences held during the second week of February.

Components will release a Final MAR not later than the last Friday in February. OUSD(AT&L) will prepare and coordinate transmittal letter and release (via DAMIR) the final MARs to Congress no later than 45 days after submission of the President's Budget (normally the first Monday in February). Table 10.11.2.2.T1 describes a typical reporting cycle.

Table 10.11.2.2.T1. Review Cycle Events and Typical Target Dates

Event	Responsible Party	Typical Target Date
Train the Component Trainers	OUSD(AT&L)	Nov 15
Task Components for MAR cycle	OUSD(AT&L)	Dec 10
Submit final Draft MARs	Components	Jan 15
Review and consolidate feedback to the OSD acquisition analyst	OSD staff	Feb 5
OSD/Component issue resolution teleconferences	OSD & Components	Feb 10
Release Final MARs to OSD	Components	Feb 25
Hold final OSD MAR Reviews	OUSD(AT&L)	Mar 2
Coordinate MAR package within OSD	OUSD(AT&L)	Mar 3-Mar 10

Staff MAR package to USD(AT&L) for signature	OUSD(AT&L)	Mar 12
Sign MAR transmittal letters	USD(AT&L)	Mar 18
Deliver MAR "transmittal" letters to Congress; release MARs via DAMIR	OUSD(AT&L)	Mar 20

10.11.3. Major Automated Information System (MAIS) Quarterly Report (MQR)

Chapter 144A of title 10 United States Code requires the Program Manager to submit a written MQR to the Senior Official that identifies any variance from the projected schedule, cost, or key performance parameters as baselined in the Major Automated Information System (MAIS) Annual Report (MAR). All Programs Required to Report , once having submitted a MAR, will submit MQRs even if they have not experienced any variance from their cost, schedule or performance baseline.

10.11.3.1. Reporting Cycle: Major Automated Information System (MAIS) Quarterly Report (MQR)

Although a separate report, the MQRs follow the Defense Acquisition Executive Summary (DAES) submission cycle and bear the same date as the program's DAES. The Component Acquisition Executives representative should release the MQRs (via the Defense Acquisition Management Information Retrieval tool) to the Senior Official (and to the OSD Lead) on the last business day of every third month, maintaining the DAES group reporting rotation . The OSD Lead may review MQRs to assist Components in compliance with Chapter 144A of title 10 United States Code and this guidance.

10.11.3.2. Major Automated Information System (MAIS) Quarterly Report (MQR) Form and Contents

The Defense Acquisition Management Information Retrieval (DAMIR) tool will adapt the most recent MAR or MQR (if MQR is more recent than the MAR) to create each new MQR. Instructions for the MQR can be found in the DAMIR MQR Users Guide .

The Program Manager should update information that has changed and summarize any program variances not previously reported in an MQR in the Program Status section.

The "Current Estimate or Actual" columns for each of the cost, schedule, and performance factors should be updated to reflect the Current Estimate on the as-of-date of the MQR.

10.11.3.3. Major Automated Information System (MAIS) Program Manager's Current Estimate

The Program Manager's (PMs) Current Estimate is the latest estimate of program acquisition cost, schedule milestone dates, and performance characteristic values of the approved program (i.e., the approved program as reflected in the currently approved Acquisition Program Baseline,

Acquisition Decision Memorandum, or in any other document containing a more current decision of the Milestone Decision Authority or other approval authority).

- For cost, the current estimate is normally the President's budget plus or minus fact of life changes.
- For schedule, the Current Estimate is normally the PMs best estimate of current schedule milestone dates.
- For performance, it is normally the PM's best estimate of current performance characteristic values.

10.11.3.4. Major Automated Information System (MAIS) Quarterly Report (MQR) Anticipation and Receipt

Program Managers (PMs) are responsible for reporting the execution status of their programs to their acquisition management chain: Program Executive Officer, Component Acquisition Executive, Milestone Decision Authority, and-for Chapter 144A Quarterly Reports purposes-the Senior Official. If a PM becomes aware the program will experience a variance exceeding a Significant or Critical Change threshold, the PM should immediately notify his/her acquisition management chain, in advance of the due date for the next MQR. Since the MQR is the vehicle for official notification of Significant and Critical changes, the 45- or 60-day deadlines for reporting to Congress are established from the date the MQR is due to the office of the Senior Official, i.e., the last business day of the month the MQR is due.

- If determination of a Significant Change is contemplated, the deadline for Notification to Congress is the last business day before 45 days expire.
- If determination of a Critical Change is contemplated, the deadline for conducting a program evaluation and certifying a report of results to Congress is the last business day before 60 days expire.

10.11.3.5. Determinations by the Senior Official

The (staff office of a) Senior Official should 1) promptly review a Major Automated Information System (MAIS) Quarterly Report (MQR) to see whether it reflects a less than "significant" (or no) variance, a "Significant Change," or a "Critical Change" in cost, schedule or performance and, 2) each month promptly provide the MQR to the Senior Official. Senior Officials may choose to obtain independent opinions on the measurement of a variance and proper determination of a Change.

If none of the reported factors exhibit a variance exceeding a Significant Change threshold , nothing further needs to be done to satisfy the statute.

If a cost, schedule, or performance factor exhibit’s a variance exceeding a Significant or Critical Change threshold , the Senior Official makes such determination, and proceeds to satisfy the statutory requirements. Model processes for Significant Changes and Critical Changes are suggested below.

10.11.4. Significant Changes

If, based on the MAIS Quarterly Report (MQR) , the Senior Official makes a determination that a Significant Change has occurred, he or she must notify the congressional defense committees in writing of that determination not later than 45 days after the MQR was due.

10.11.4.1. Significant Change Thresholds

A Significant Change is defined as one in which one of the following has occurred:

- There has been a schedule change that will cause a delay of more than 6 months but less than a year in any program schedule milestone or significant event from the schedule submitted as the Original Estimate;
- The estimated total acquisition cost or total life-cycle cost for the program has increased by at least 15 percent, but less than 25 percent, over the Original Estimate, or
- There has been a significant, adverse change in the expected performance from the parameters submitted in the original MAR. The Department, however, has determined that a "significant, adverse change" is defined as a failure to meet a Key Performance Parameter (KPP) threshold value, which is the same definition chosen for a Critical Change in performance (addressed below). Therefore, all such failures will be determined to be Critical Changes .

10.11.4.2. Model Significant Change Process

When a Significant Change is determined, the Senior Official must notify the congressional defense committees in writing that he or she has made such Determination. The Notification should be in the form of a one-to-two page letter signed by the Senior Official and is due to the congressional defense committees not later than 45 days after the date the MAIS Quarterly Report (MQR) was due in the office of the Senior Official.

The Notification should acknowledge that a Significant Change, as defined by the statute, has occurred. Succinctly state the specific factor that has varied in excess of a threshold, the reasons for the variance, and indicate what actions (including reprogramming) the PM has taken or may take to bring the program back within the Original Estimate parameters or to avoid further deviation from the Original Estimate. If known, indicate the projected new cost or schedule.

If a Notification has been sent informing the congressional defense committees of a Significant Change in one element (for example, Milestone C date), and that elements variance has

expanded (but not exceeded a Critical Change criteria) in a subsequent MQR, no additional Notification need be sent to the congressional defense committees. If, however, a subsequent MQR indicates that a different reporting element has an over-threshold variance, another Notification must be sent informing the congressional defense committees of this additional basis for a Determination of Significant Change. When one Significant Change is identified, a prudent Program Manager will examine the entire program for other Significant Changes and report them all in a single Notification letter. One schedule element slip, for example, is likely to cause subsequent elements to slip.

10.11.4.3. Coordination and Transmittal of a Significant Change Notification to Congress

Notifications are drafted by Program Managers and coordinated with their respective Program Executive Officers and Component Acquisition Executives (CAE) for signature by the Senior Official. The Notification must be coordinated with the Under Secretary of Defense (Acquisition, Technology, and Logistics), the Deputy Chief Management Officer, or the DoD Chief Information Officer, as appropriate before sending to Congress. Copies of Notifications should be sent to the cognizant Overarching Integrated Product Team (OIPT) Leader before transmittal to Congress. Example Significant Change Notifications are available.

10.11.5. Critical Changes

10.11.5.1. Critical Change Thresholds

10.11.5.2. Five-Year-to-Full Deployment Decision (FDD) Threshold

10.11.5.2.1. Failed to Achieve a Full Deployment Decision (FDD)

10.11.5.2.2. Five-Year Development Clock Start Date/Stop Date

10.11.5.2.3. Full Deployment Decision (FDD) Date

10.11.5.3. Program Evaluation to Inform a Critical Change Report

10.11.5.4. Report on Critical Program Changes

10.11.5.5. Model Critical Change Process

10.11.5.5.1. Critical Change Triage Team; Determination and Tasking

10.11.5.5.2. Critical Change Team (CCT) and Meetings

10.11.5.5.3. Critical Change Integrated Product Teams (IPT) Membership and Focus

10.11.5.5.4. Critical Change Process Calendar

10.11.5.5.5. Critical Change Report (CCR)

10.11.5.6. Coordination and Transmittal of a Critical Change Report (CCR) to the Congressional Defense Committees

10.11.5. Critical Changes

When the Senior Official anticipates or makes a determination that a Critical Change has occurred, the Senior Official should initiate a process to satisfy the statutory and regulatory requirements. This section describes those requirements and sets forth a model process.

10.11.5.1. Critical Change Thresholds

A Critical Change is defined as one in which any of the following has occurred:

- The system failed to achieve a full deployment decision (FDD) within 5 years after the Milestone A decision or if no Milestone A then the date when the preferred alternative was selected and approved by the Milestone Decision Authority (this threshold is more fully explained in section 10.11.5.2, below);
- There has been a schedule change that will cause a delay of one year or more in any program milestone or significant event from the schedule originally submitted to Congress in the Major Automated Information System (MAIS) Annual Report (MAR);
- The estimated total acquisition cost or total life-cycle cost for the program has increased by 25 percent or more over the Original Estimate submitted to Congress in the MAR; or
- There has been a change in the expected performance of the MAIS that will undermine the ability of the system to perform the functions anticipated at the time information on the program was originally submitted to Congress in the MAR. The Department has determined that a critical performance change is defined as a failure to meet a Key Performance Parameter threshold value.

10.11.5.2. Five-Year-to-Full Deployment Decision (FDD) Threshold

Major Automated Information System (MAIS) programs should be structured so that each Increment can achieve an FDD within five years from the Milestone A decision, or if there was no Milestone A decision, the date when the preferred alternative was selected and approved by the Milestone Decision Authority. The program structure and (upon sufficient maturity) the criteria that constitute a FDD, should be reflected in the Increments Acquisition Strategy and Acquisition Program Baseline.

10.11.5.2.1. Failed to Achieve a Full Deployment Decision (FDD)

The phrase "failed to achieve" is interpreted literally; i.e., the Increment must have actually exceeded (not expected to exceed) five years between start of the 5-year development clock and FDD. A breach of this threshold will therefore be reported in the Major Automated Information System (MAIS) Quarterly Report (MQR) next due after the 5-year point.

If, however, any other Critical Change is reported in advance of the 5-year point and it is expected that FDD will not occur within the 5-year threshold, include an additional determination of the 5-year-to-FDD breach in the evaluation and report to Congress. When the 5-year point arrives, re-send the same report to Congress with a transmittal letter indicating that "the previously reported certifications were meant to apply now."

If there is no reason to determine and report any Critical Change in advance of failure to achieve FDD within 5 years, such determination, evaluation, report, and certification will be accomplished after the 5-year point is reached in accordance with the first paragraph of this section.

For Acquisition Category III programs that are graduating to MAIS status and have achieved an FDD (no matter how long it took), that event has overcome the 5-year-to-FDD breach criterion, and it is no longer applicable. Graduating programs carry their program history with them (including the date the 5-year development clock was started).

10.11.5.2.2. Five-Year Development Clock Start/Stop Dates

The 5-year development clock starts when the automated information system or information technology investment is granted Milestone A approval for the program, or if there was no Milestone A decision, the date when the preferred alternative is approved by the Milestone Decision Authority (excluding any time during which program activity is delayed as a result of a bid protest).

Because schedule events and thresholds are expressed in whole months, the additional time to be added as a consequence of bid protest is calculated by dividing the bid protest time lost in days by 30 and rounding up to the next month. For example, if a bid protest was filed on October 26, 2011 and resolved on December 20, 2011 (53 days), the 5-year development clock would be extended two months (53/30=1.76 and rounded up to 2 months).

10.11.5.2.3. Full Deployment Decision (FDD) Date

With respect to a MAIS program, the Full Deployment Decision is the final decision made by the Milestone Decision Authority (MDA) authorizing an Increment of the program to deploy software for operational use. Each Increment can have only one FDD. The 5-year development clock stops when the MDA signs the FDD Acquisition Decision Memorandum.

If the Increment will have multiple partial deployments, the MDA should specifically designate which partial deployment decision will serve as the FDD for the entire Increment. At the MDAs discretion and as specified in the Acquisition Strategy, a partial deployment would be appropriately designated as the FDD with an accumulation of successes related to the entire Increment, such as:

- Low percentage of total functionality remains to be developed;
- IOT&E indicates that the system is operationally effective, suitable, and survivable;
- High percentage of capability fielded;

- High percent of geographical fielding completed;
- High percentage of legacy system(s) replaced;
- Insignificant risk associated with remaining releases ; and
- Achievement of Initial Operational Capability.

If the MDA has not formally specified which partial deployment will serve as the FDD, by default, the last partial deployment will be the FDD.

10.11.5.3. Program Evaluation to Inform a Critical Change Report

Upon determination of a Critical Change, the statute directs an evaluation ("E") of the program, including "an assessment of-

- (E1) "the projected cost and schedule for completing the program if current requirements are not modified;
- (E2) "the projected cost and schedule for completing the program based on reasonable modification of such requirements; and
- (E3) "the rough order of magnitude of the cost and schedule for any reasonable alternative system or capability."

While not *per se* a part of the Critical Change Report that will be submitted to the congressional defense committees, these three "E" assessments will feed into the four certification ("C") areas of the Critical Change Report described below.

10.11.5.4. Report on Critical Program Changes

The statute further directs delivery of a report (i.e., Critical Change Report (CCR)) to the congressional defense committees, including: "a written certification (with supporting explanation) stating that-

- (C1) "the automated information system or information technology investment to be acquired under the program is essential to the national security or to the efficient management of the Department of Defense;
- (C2) "there is no alternative to the system or information technology investment which will provide equal or greater capability at less cost;
- (C3) "the new estimates of the costs, schedule, and performance parameters with respect to the program and system or information technology investment, as applicable, have been determined, with the concurrence of the Director of Cost Assessment and Program Evaluation, to be reasonable; and
- (C4) "the management structure for the program is adequate to manage and control program costs."

To avoid a prohibition on the obligation of funds for major contracts, the report must be submitted to the congressional defense committees not later than 60 days after the date the Major Automated Information System (MAIS) Quarterly Report (MQR) was due to the staff office of

the Senior Official.

10.11.5.5. Model Critical Change Process

10.11.5.5.1. Critical Change Triage Team; Determination and Tasking

In anticipation of, or upon receipt of a Major Automated Information System Quarterly Report (MQR) containing notice of a Critical Change, the staff office of the Senior Official should organize a Triage Meeting to:

- Review the nature and severity of the Change;
- Recommend a tailored Critical Change process to the Senior Official; and
- Outline the leadership structure and scope of the Critical Change Team (CCT) that will conduct the evaluation and prepare a Critical Change Report (CCR). See below for further advice on organizing the CCT and its several Integrated Product Teams (IPTs).

For Acquisition Category (ACAT) IAM programs, Triage Meeting attendees should be senior representatives from 1) the staff office of the Senior Official, 2) the office of the Joint Chiefs of Staff (J8,Force Structure Resources and Assessment), 3) the office of the Deputy Director, Program Evaluation (plus the office of the Deputy Director Cost Analysis if the Under Secretary (Acquisition, Technology and Logistics) is the Milestone Decision Authority), 4) the office of the Director, Acquisition Resources & Analysis, and 5) the OSD office with program oversight responsibility (Overarching Integrated Product Team, Investment Review Board, or equivalent).

For ACAT IAC programs, Triage Meeting attendees should be from analogous Component organizations.

The staff office will document the recommendations of the Triage Meeting in a draft Determination and Tasking memorandum to be signed by the Senior Official. The "Determination and Tasking" memorandum will:

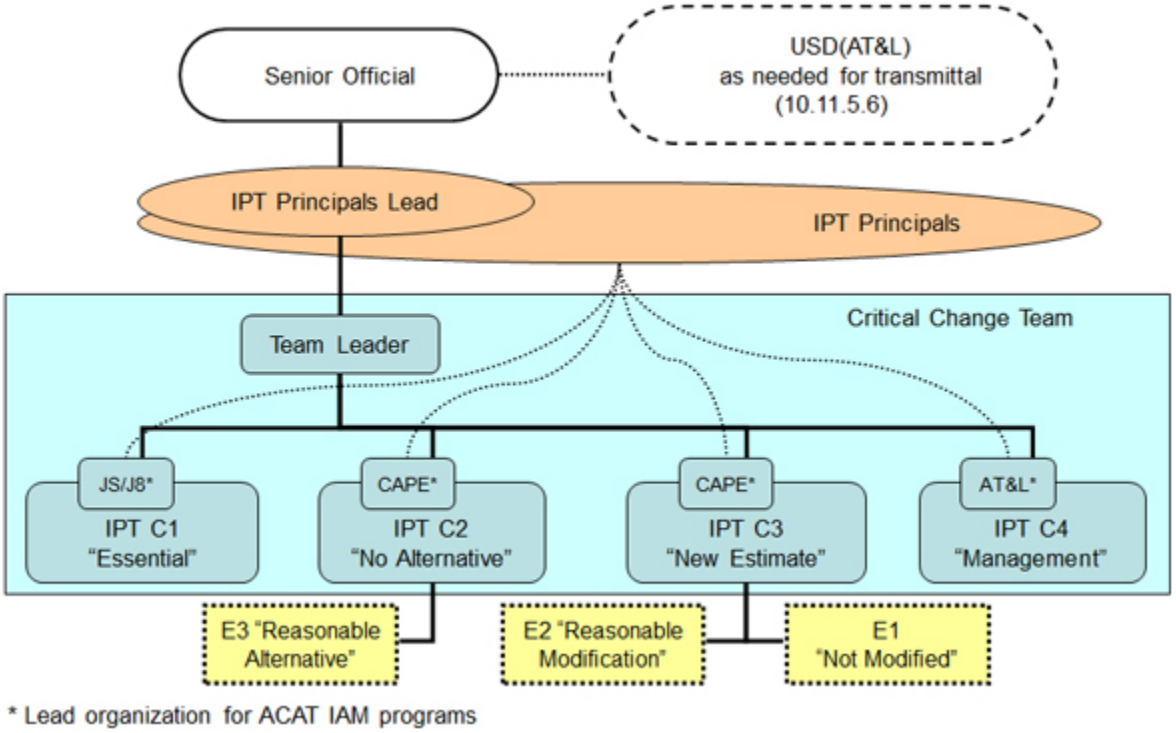
- State the Senior Official's determination and nature of the Critical Change;
- Direct a program evaluation be conducted;
- Direct a report of the results be prepared; and
- Designate leadership of a Critical Change Team to manage the process.

10.11.5.5.2. Critical Change Team (CCT) and Meetings

As part of the "Determination and Tasking" memorandum, the Senior Official should establish leadership for a CCT to conduct the program evaluation and produce the Critical Change Report. A Team Leader from an appropriate oversight or program integration office under the Senior Official will organize the CCT and integrate the contributions of the several IPTs. The Team Leader should be an O-5/O-6 or equivalent civilian. If the magnitude of the program warrants it, a Flag/General Officer/Senior Executive Service-level "Integrated Product Team (IPT) Principals Lead" from the Senior Official's staff should be named to provide advice and direction to the CCT, as well as to chair meetings of a committee of "IPT Principals." Figure 10.11.5.5.2.F1. is a

notional depiction of CCT Organization and Reporting Paths.

Figure 10.11.5.5.2.F1. Critical Change Team (CCT) Organization and Reporting Path



Ultimately, the Senior Official must be satisfied sufficiently with the evaluation and report to sign the certification statements required by the statute. When the Senior Official perceives the need to specify leadership or membership of individual IPTs, that specification should also be made as part of the "Determination and Tasking" memorandum. Otherwise, the IPT Principals Lead and Team Leader will select individual members and leadership of the IPTs that will focus on certifications C1-4. Membership should include all interested parties, and individuals must be empowered to represent their organizations. In all cases, IPT membership and leadership designations should consider joint/departmental interests as well as the circumstances of the Critical Change.

A kickoff meeting of the CCT should be held as soon as possible in anticipation of a Critical Change being determined. The IPT Principals Lead and CCT Leader should guide the organization of the CCT into IPTs and specify expected contributions and a detailed timeline. The CCT (or the Team Leader alone) should meet again with the IPT Principals Lead as necessary, and at least once for a mid-process progress check. Eventually, the CCT should meet to pre-brief the IPT Principals Lead on the final Report. The final Report and briefing should then be presented to the IPT Principals for a final review of the Report before delivery to the Senior Official for certification (signature).

10.11.5.5.3. Critical Change Integrated Product Teams (IPT) Membership and Focus

The Critical Change process should be conducted by IPTs under the Critical Change Team (CCT), each focused on Certifications 1-4 . To preserve IPT and CCT independence to the maximum extent practicable, team membership should be independent of the Program Management Office (PMO). IPT membership should be selected to maximize the success of the group and avoid non-productive contributions. For Acquisition Category (ACAT) IAM programs, IPT membership is suggested below. For ACAT IAC programs, the IPT membership representatives should be from analogous Component organizations plus the appropriate OSD organizations.

- IPT C1 will document the explanation that permit's the Senior Official to certify "the automated information system or information technology investment to be acquired under the program is essential to the national security or to the efficient management of the Department of Defense." The IPT C1 should write a few paragraphs about the need for the program:
    - Include threat, mission, and current systems available to meet the threat or efficient management need.
    - Reference relevant strategy documents, Concept of Operations (CONOPS), roadmaps, requirements documents, threat assessments, Quadrennial Defense Review, etc.
    - Address the program and the capability to be acquired, as appropriate.
    - *IPT C1 members* : Component operations staff, Program Executive Officer (PEO) staff, Component Acquisition Executive (CAE) staff, user representatives, Program Manager (PM), Joint Chiefs of Staff (JCS)/J8, Office of the Secretary of Defense (OSD) (Principal Staff Assistant (PSA) and the Overarching Integrated Product Team (OIPT) acquisition analysts).
- IPT C2 will document the explanation that permit's the Senior Official to certify that "there is no alternative to the system or information technology investment which will provide equal or greater capability at less cost." This IPT should:
    - Reference any existing Analysis of Alternatives (AoA) and discuss any major deviations from past analysis. Do not re-accomplish the AoA.
    - Identify any alternative systems.
    - Include the assessment (E3) of the "rough order of magnitude of the cost and schedule for any reasonable alternative system or capability."
    - *IPT C2 members* : Component operations staff, user representatives, Component & program office cost estimators, PM, CAE and PEO staff; JCS/J8; OSD (PSA; Office of the Deputy Director, Program Evaluation; and OIPT acquisition analyst).
- As indicated in Figure 10.11.5.5.2.F1 , above, IPT C3 is responsible for assessing E1 and E2, forming conclusions thereupon, and recording an explanatory statement that permit's the Senior Official to certify "the new estimates of costs, schedule, and performance parameters with respect to the program and system or information technology investment, as applicable, have been determined, with the concurrence of the Director of Cost Assessment and Program Evaluation (D, CAPE), to be reasonable." This IPT should:
    - Identify changes that have occurred to the program's requirements.

    - Summarize acquisition and total life-cycle cost growth from the Original Estimate. Display changes in constant (BY) and current (TY) dollars.
    - Include rationale for growth such as technical uncertainties/corrections or changes in inflation, requirements, escalation outlay, quantity, schedule, budget, or estimating errors.
    - Include the assessment (E1) about the "projected cost and schedule for completing the program if current requirements are not modified."
    - Include the assessment (E2) about "projected cost and schedule for completing the program based on reasonable modification of ... requirements."
    - Update the cost estimate and milestone schedule
    - Develop a draft Acquisition Program Baseline for management approval concurrent with the Critical Change Report. The Original Estimate status is explained in 10.11.7.1.
    - IMPORTANT: In addition to concurrence, an independent cost estimate by D, CAPE) may also be required. See 10.11.7.2 and 10.5.1. Independent Cost Estimates for further explanation.
    - *IPT C3 members:* Component operations staff, user representatives, Component & program office cost estimators, PM, CAE and PEO staff; JCS/J8; OSD (PSA; Office of the Deputy Director, Cost Assessment; OIPT acquisition analyst).
- IPT C4 will document the explanation that permit's the Senior Official to certify "the management structure for the program is adequate to manage and control program costs." The IPT C4 should:
    - Review PMO and contractor management structures.
    - Conduct site visit's if the IPT Principal Lead determines they would be useful.
    - Re-examine recent program oversight reviews and recommendations to appraise the degree and success of implementation.
    - Develop a draft Acquisition Decision Memorandum for the MDA to direct corrective actions.
    - *IPT C4 members* : CAE and PEO staff; PM; OSD (Office of the Assistant Secretary of Defense (Research and Engineering) (ASD(R&E)); Offices of the Deputy ASD (Developmental Test & Evaluation) and the Deputy ASD (Systems Engineering), Office of the Director, Defense Procurement and Acquisition Policy, Office of the DoD Chief Information Officer; and the OIPT acquisition analyst).

Table **10.11.5.5.3.T1** summarizes recommended IPT membership.

Table 10.11.5.5.3.T1. Summary of Recommended IPT Membership

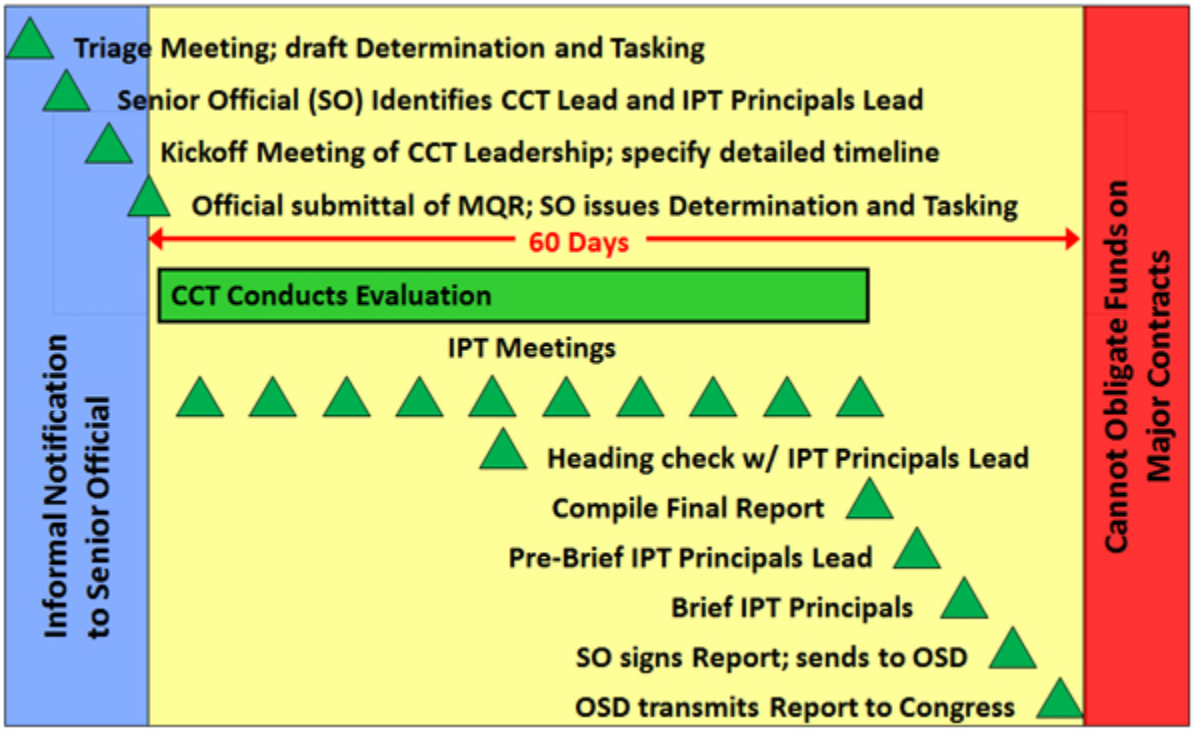
IPT	**C1**	**C2**	**C3**	**C4**
Organization	**essential**	**no alternative**	**new estimate**	**management**
PMO/PM (as required)	X	X	X	X
PMO Cost/Finance		X	X	

PEO Staff		X	X	X
CAE Staff	X	X	X	X
Component Operations Staff	X	X	X	
User Representatives	X	X	X	
JCS/J8	X	X	X	
OSD Acquisition Analyst	X	X	X	X
DASD(SE)				X
DASD(DT&E)				X
AT&L(DPAP)				X
OSD CAPE		X	X	
OSD PSA	X	X	X	X
DoD CIO				X

10.11.5.5.4. Critical Change Process Calendar

Figure 10.11.5.5.4.F1 **.** portrays a typical Critical Change process calendar and shows the general flow of events described in 10.11.5.5.

Figure 10.11.5.5.4.F1. Critical Change Process Calendar



10.11.5.5.5. Critical Change Report (CCR)

The Critical Change Report is envisioned to be a document of about six pages: a two-page letter offering a succinct introduction/background on the program and the events that led to the Critical Change that contains the required certifications and one page each for the explanations provided by the Integrated Product Teams (IPTs) C1-4. The IPT C1-4 sections include an outline of corrective actions that will be taken to add discipline to program execution and avoid repeated deviation from the new Original Estimate. Example CCRs are available.

In most cases, an Acquisition Decision Memorandum and Acquisition Program Baseline will also be required to direct the actions cited in the CCR.

In case of an audit, it is important for the Component to keep all records used to prepare the CCR.

10.11.5.6. Coordination and Transmittal of a Critical Change Report (CCR) to the Congressional Defense Committees

In accordance with section 2445c(d)(1)(B) of title 10, United States Code , CCRs must be sent "through the Secretary of Defense, to the congressional defense committees." In cases where the Senior Official is an individual within OSD, this will be inherent in the CCR coordination and signature process.

In cases where the Senior Official is not an individual within OSD, the CCR shall be signed by the Senior Official and provided to the cognizant OSD official for transmittal to Congress. The signed CCR should be provided to the appropriate OSD official with draft Transmittal Letters addressed to the congressional defense committees no later than 5 working days before expiration of the 60-day period.

10.11.6. Restrictions on Obligation of Funds

If the Senior Official determines a Critical Change has been reported by a program and a Critical Change Report (CCR) is not submitted to the congressional defense committees within the 60-day period, "Appropriated funds may not be obligated for any major contract under the

program." For Chapter 144A purposes, the term "major contract" is defined as any contract under the program that is not a firm-fixed price contract whose target cost exceeds $17M (FY00 constant dollars); or if no contract exceeds $17M (FY00 constant dollars), then the largest contract under the program.

Program Managers should not obligate funds for a major contract during the period in which the CCR is being prepared.

The prohibition on the obligation of funds will cease to apply on the date on which the congressional defense committees have received a report in compliance with Chapter 144A requirements.

10.11.7. Revision of the Original Estimate

According to Chapter 144A of title 10 United States Code , a Critical Change is the only opportunity to update the Original Estimate contained in the Major Automated Information System (MAIS) Annual Report (MAR): "an adjustment or revision of the Original Estimate or information originally submitted on a program may be treated as the Original Estimate or information initially submitted on the program if the adjustment or revision is the result of a Critical Change."

10.11.7.1. Status of the Critical Change Report (CCR) Estimate

The new estimates of cost, schedule, and performance parameters included in a CCR will be the basis for a revised Original Estimate in the Major Automated Information System (MAIS) Annual Report (MAR) and the MAIS Quarterly Report (MQR), and inform the continuing management of the program. An Acquisition Decision Memorandum and an Acquisition Program Baseline (APB) should therefore be coordinated concurrently with the CCR to direct the actions responsive to the CCR. Failing to get concurrent signatures, the Program Manager (PM) should make approval of an updated APB a high priority.

Once the CCR has been sent to Congress and before the next MQR is prepared, the Program Manager should submit the new cost, schedule, and performance parameters as an updated MAR Original Estimate using the Defense Acquisition Management Information Retrieval (DAMIR) tool (see the DAMIR MAR Users Guide , and call the DAMIR Hot Line for assistance). Subsequent MQRs will commence reporting variances from the revised Original Estimate .

10.11.7.2. Independent Cost Estimates

The Weapon Systems Acquisition Reform Act of 2009 (P.L. 111-23, May 22, 2009), codified at section 2334(a)(6)) of title 10 United States Code , requires the Director, Cost Assessment and Program Evaluation (D, CAPE) to conduct an Independent Cost Estimate (ICE) in the case of a Major Automated Information System (MAIS) Critical Change if the Milestone Decision Authority (MDA) is the Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD(AT&L); and at any other time considered appropriate by the Director or upon the request

of the USD(AT&L).

Additionally, DTM 11-009 , Acquisition Policy for Defense Business Systems (DBS), June 23, 2011, requires the D, CAPE to conduct an ICE for all DBS MAIS reporting a Critical Change if the MDA is the USD(AT&L), the Deputy Chief Management Officer, or the Department of Defense Chief Information Officer. If the MDA is delegated after incurrence of a Critical Change, an ICE is still required.

If a D, CAPE ICE was conducted, great weight should be given to the resulting estimate derived from that effort as it is likely to possess the accuracy desired for publication in the Acquisition Program Baseline.

10.11.7.3. Base Year Conversion

The Base Year of an Original Estimate (as reported in the Major Automated Information System (MAIS) Annual Report (MAR) and MAIS Quarterly Report) may be updated without going through a Critical Change process, provided that the proper conversion factors have been applied. Such a conversion should be footnoted in those reports through submittal of the next MAR. The conversion calculations should be retained as a Memorandum for the Record in the program files.

10.11.8. Sources for Additional Information

Chapter 144A Key Documents and References includes:

- Defense Acquisition Guidebook 10.11 - MAIS Statutory Reporting
- DAMIR MAR Users Guide
- DAMIR MQR Users Guide
- Section 811 FY07 NDAA - Time-Certain Development for Defense Business Systems
- Automated Information System Acquisition Terms of Reference and Definitions
- Chapter 144A of title 10 United States Code (annotated)
- MAIS Annual Report Program Analysts and Principal Staff Representatives
- Chapter 144A Overview Briefing

10.12. Defense Acquisition Executive Summary (DAES) Process

10.12.1. Defense Acquisition Executive Summary (DAES) Reporting Requirements

10.12.1.1. Duration of Defense Acquisition Executive Summary (DAES) Reporting

10.12.1.2. Defense Acquisition Executive Summary (DAES) Submission Process

10.12.1.3. Defense Acquisition Executive Summary (DAES) Content

10.12.1.4. Consistency of Defense Acquisition Executive Summary (DAES) Data

10.12. Defense Acquisition Executive Summary (DAES) Process

The purpose of the DAES is to provide a venue to identify and address, as early as possible, potential and actual program issues which may impact the Department of Defenses (DoD's) on-time and on-schedule delivery of promised capabilities to the warfighter. The DAES is not just a report; it is a process that includes;

1. Submission of program status and assessment information by the Program Manager of each Major Defense Acquisition Program (MDAP) and Major Automated Information System (MAIS) for which the Under Secretary of Defense for Acquisition, Technology, and Logistics (USD(AT&L)) is the Milestone Decision Authority;
2. Independent assessments of each program by Office of the Secretary of Defense (OSD) and Joint Staff stakeholders; and
3. A monthly DAES meeting.

The goal of the DAES process is to facilitate communication between, and provide feedback to, key stakeholders in OSD, the Joint Staff, the Components, and Program Offices. It is important to note that the DAES is an internal management system meant to fulfill the needs of senior Department of Defense executives and is NOT for general public consumption. Unlike the Selected Acquisition Report information, DAES information is considered to be For Official Use Only and is not releasable outside the department without prior approval from the Director, Acquisition and Resource Analyses.

The DAES process enables the USD(AT&L) to fulfill statutory requirements to manage and oversee MDAPs and MAIS programs. Additionally, it establishes a mechanism for the Department to meet the Unit Cost Reporting requirement of section 2433, Chapter 144 of title 10, United States Code . Access to the data reported through the DAES also enables the Director of Performance Assessments and Root Cause Analyses to fulfill statutory requirements to perform program assessments as directed by the Weapon Systems Acquisition Reform Act of 2009 (Section 103 Public Law 111-23).

10.12.1. Defense Acquisition Executive Summary (DAES) Reporting Requirements

The DAES process for a program begins when the Under Secretary of Defense (Acquisition,

Technology, and Logistics) (USD(AT&L)) designates the program as a DAES reporting program and the Office of the USD(AT&L), specifically the Office of the Director, Acquisition Resources and Analyses (ARA), assigns it to a quarterly reporting group (A, B, or C). Most DAES reporting programs are ACAT ID or IC programs and full DAES reporting usually begins at program initiation (typically Milestone B) and after the program has submitted its initial Selected Acquisition Report (SAR).

With the exception of contract/earned value information, DAES information is only required to be submitted on a quarterly basis. Contract/earned value information is required to be submitted on a monthly basis. Whether or not it has changed from the previous submission, all required information must be submitted at a minimum each quarter (or month for contract/earned value information). The month in which a program is required to submit is determined by its DAES Group. Table **10.12.1.T1** below shows the yearly calendar for all three groups. It is important to note that the DAES process overlaps; each DAES Group is at a different stage of the process during any given month. For example, the Group A DAES submitted by the PM at the end of January is assessed by OSD in February and the corresponding DAES meeting is held in March.

Table 10.12.1.T1. DAES Group Schedules

Month	PM Prepares and Submits DAES (NLT Last Working Day of Month)	Submissions Available to OSD (First Working Day of Month)	OSD Assessments Due (8th Working Day of Month)	DAES Meeting (3rd Week of Month)
Jan	**Group A**	**Group C**	**Group C**	**Group B**
Feb	**Group B**	**Group A**	**Group A**	**Group C**
Mar	**Group C**	**Group B**	**Group B**	**Group A**
Apr	**Group A**	**Group C**	**Group C**	**Group B**
May	**Group B**	**Group A**	**Group A**	**Group C**
Jun	**Group C**	**Group B**	**Group B**	**Group A**
Jul	**Group A**	**Group C**	**Group C**	**Group B**
Aug	**Group B**	**Group A**	**Group A**	**Group C**
Sep	**Group C**	**Group B**	**Group B**	**Group A**
Oct	**Group A**	**Group C**	**Group C**	**Group B**
Nov	**Group B**	**Group A**	**Group A**	**Group C**
Dec	**Group C**	**Group B**	**Group B**	**Group A**

10.12.1.1. Duration of Defense Acquisition Executive Summary (DAES) Reporting

Once DAES reporting is initiated, it continues until the program is 90% or more delivered through the production phase (or 90% expended, if RDT&E only), at which time a program will begin submitting only a Unit Cost Report (UCR) DAES pursuant to section 2433 of title 10,

United States Code that is supplemented by Sustainment information.

DAES reporting may be terminated for a program when it is 90% delivered or expended and the final SAR has been submitted. The official list of active DAES reporting programs is maintained by the Office of the Director, ARA and is available via the Defense Acquisition Management Information Retrieval (DAMIR) system.

10.12.1.2. Defense Acquisition Executive Summary (DAES) Submission Process

The DoD Components submit the DAES information to DAMIR in accordance with the prescribed monthly or quarterly submission cycle. DAES submissions are due to OSD on the last working day of the month. The required information consists of both the electronic DAES information and supplemental Microsoft Office Power Point charts.

DAES information must be submitted to the Defense Acquisition Management Information Retrieval (DAMIR) system in the prescribed format. Most program offices will enter the DAES information into one of the Service acquisition information management systems (i.e., Army AIM, Air Force SMART, or Navy Dashboard) and the Services will electronically submit the information to the DAMIR system via web services. Alternatively, programs without the capability to submit electronically via web services may obtain permission from the Office of the Director, Acquisition Resources and Analyses and their Component leadership to enter the data directly into the DAMIR system.

The supplemental Power Point charts are sent to the Component who then e-mails them to DAMIR@osd.mil . The DAMIR team loads the charts into the DAMIR Acquisition Documents where they are visible to any DAMIR user with DAES access to the program. As the DAMIR system is the mechanism that OSD uses to view and assess the programs, it is highly recommended that each program office access DAMIR and validate that all information and supplemental charts were correctly submitted.

10.12.1.3. Defense Acquisition Executive Summary (DAES) Content

The content of a DAES submission is dependent on where a program is in the Acquisition lifecycle. See Table **10.12.1.3 .T1** below for a summary of the required information. Detailed instructions on what is required in each section can be found in the Defense Acquisition Management Information Retrieval system.

Table 10.12.1.3 .T1. DAES/Web Services Information Requirements

Information	Program Initiation-75%	> 75%	Minimum Update Frequency
Program Information	-	-	Quarterly
Points of Contact	-	-	Quarterly
APB Dates	Calculated		Quarterly
Mission & Description	-	-	Quarterly

Information	Program Initiation-75%	> 75%	Minimum Update Frequency
Executive Summary	-		Quarterly
Threshold Breaches	Calculated		Quarterly
PM Assessments	-		Quarterly
Schedule	-		Quarterly
Performance	-		Quarterly
Track to Budget	-		Quarterly
Cost & Funding	-	-	Quarterly
Low Rate Initial Production	-		Quarterly
Foreign Military Sales	-		Quarterly
Nuclear Costs	-		Quarterly
Unit Cost	Calculated		Quarterly
Contracts/Earned Value	-		Monthly
Deliveries & Expenditures	-		Quarterly
Operating & Support Costs	-	-	Quarterly
Sustainment	-	-	Quarterly
Risk Summary Chart (Power Point)	-		Quarterly
Issue Summary Chart (Power Point)	-		Quarterly

10.12.1.4. Consistency of Defense Acquisition Executive Summary (DAES) Data

The DAES information submitted should be the Program Managers assessment of the program and be consistent with the Acquisition Program Baseline (APB) , President's Budget (PB), Acquisition Decision Memorandums (ADMs) and other official program guidance. The Program Manager is responsible for both ensuring the accuracy, completeness and consistency of the information, and for elevating risks and other issues that may require managerial attention.

10.12.1.5. Office of the Secretary of Defense (OSD) Defense Acquisition Executive Summary (DAES) Assessment Process

Once the DAES information is submitted to the Defense Acquisition Management Information Retrieval (DAMIR) system by the Department of Defense Components, OSD and Joint Staff stakeholders have 8 working days to perform an assessment of the status of each program in the current DAES group that is less than 75% complete. The purpose of the OSD assessment process is to ensure routine surveillance of Major Defense Acquisition Programs by the OSD and Joint Staff stakeholders and to identify risks and issues that require managerial attention.

The OSD and Joint Staff stakeholders collectively evaluate each program in 10 different categories. A green/yellow/red rating and an associated narrative is provided for each category rated by an individual stakeholder. The categories evaluated by OSD are identical to the categories evaluated by the Program Offices. The OSD assessments provide an independent assessment of program execution status and are used when selecting programs to be briefed at

the DAES meeting. Detailed instructions on completing a DAES assessment can be found in the DAMIR Acquisition Documents.

Table 10.12.1.5.T1 below shows which OSD and Joint Staff stakeholders have primary responsibility for each indicator; however, any stakeholder may evaluate any category.

Table 10.12.1.5.T1 List of Assessment Indicators

Assessment Indicator	Rating Organization(s)
Cost	ARA/AM, CAPE, DCMA, OIPT Lead
Schedule	OIPT Lead
Performance	OIPT Lead, ASD(R&E)/SE, Joint Staff
Funding	ARA/RA, USD(C)
Test	OT&E, ASD(R&E)/DT&E
Sustainment	L&MR, P&R
Management	OIPT Lead
Contracts	DPAP, IC
Interoperability	OIPT Lead
Production	MIBP
International	International Cooperation

10.12.1.6. Defense Acquisition Executive Summary (DAES) Data Quality Assessment

In addition to the program assessment process performed by the Office of the Secretary of Defense (OSD) and Joint Staff stakeholders, the Office of the Director, ARA/Acquisition Visibility (AV) concurrently performs a data quality assessment of the submitted information. All information is reviewed for availability, currency, and consistency. Non-compliance with reporting requirements is reported to the Components and requires the immediate correction and re-submittal of information.

10.12.1.7. Defense Acquisition Executive Summary (DAES) Senior Meeting Forum

The Principal Deputy Under Secretary of Defense (Acquisition, Technology, and Logistics) (PDUSD(AT&L)) conducts a monthly DAES meeting. The purpose of the meeting is to provide a senior forum in which to surface problems requiring managerial attention with the intent of achieving early and effective resolution.

It is typically a two-hour meeting scheduled for the third week of the month. Attendance is tightly controlled.

10.12.1.7.1 Defense Acquisition Executive Summary (DAES) Agenda Selection

Once the Office of the Secretary of Defense (OSD) assessments have been submitted, the DAES meeting agenda selection process begins. The Director, Acquisition Resources and Analyses

(ARA) chairs a DAES Program Selection meeting on approximately the 15 th working day of the month at which the Overarching Integrated Product Team Leaders and the Director, Program Assessment and Root Cause Analysis are responsible for recommending programs and/or issues for review at the monthly DAES meetings.

The criteria for nomination vary from month to month, but nominations normally fall within one of the following categories:

- Program Briefs. This is the most typical agenda item. Programs may be selected due to specific issues that requires management attention or as a good news story. Program assessments are just one factor used to determine if a program should be recommended, as all knowledge of the program is considered when making the selection. Program Briefs are typically presented by the Program Manager.
- Single Issue Program Updates. These are condensed briefings that normally focus on a previously identified issue where a short status update is required. Single Issue Program Updates are typically given by the OSD staff.
- Program Executive Officer (PEO) Portfolio Briefs. A PEO portfolio brief may be recommended in conjunction with a specific Program Brief or independent of a specific Program Brief. Briefings requested independent of a specific program brief are typically due to a systemic issue affecting multiple programs within the portfolio. PEO Portfolio Briefs are typically presented by the PEO.

Typically, 3 or 4 programs or issues are selected for the agenda each month. Normally, programs that are within 90 days (before or after) of a Defense Acquisition Board review are excluded from consideration. Once the agenda selection is finalized, the Office of the Director, ARA publishes the agenda and schedule.

10.12.1.7.2. Defense Acquisition Executive Summary (DAES) Briefings, Minutes, and Action Items

Templates for the Program Briefings can be found in the Acquisition Documents section of the Defense Acquisition Management Information Retrieval system. Primary focus areas of the briefings should be: contract and Acquisition Program Baseline compliance status, closure plans for known issues, risk management/mitigation of potential issues, and Better Buying Power initiatives (to include should cost).

The Program Briefing charts are due to the Office of the Director, Acquisition Resources and Analyses (ARA) no later than 6 working days prior to the scheduled date of the DAES meeting.

In addition to the selected program or issue briefings, the Office of the Director, ARA provides summaries of the Program Manager assessments and the OSD and Joint Staff assessments for each selected program as well as an update on any outstanding actions from previous DAES meetings. A data quality assessment update is also provided by the Office of the Director, ARA/Acquisition Visibility. Other systemic issues are briefed as required or directed by the Principal Deputy Under Secretary of Defense (Acquisition, Technology, and Logistics)

(PDUSD(AT&L)).

Within 5 working days of the DAES meeting, the Office of the Director, ARA submits the DAES meeting minutes, including any action items, to the PDUSD(AT&L) for approval. Once approved, the meeting minutes are posted in the DAMIR Acquisition Documents. The Office of the Director, ARA is responsible for tracking DAES action items to completion.

10.13. Acquisition Visibility

In 2007, the Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics) (USD(AT&L)) started an initiative to achieve Acquisition Visibility (AV) within the Department of Defense (DoD). AV is defined as having timely access to accurate, authoritative, and reliable information supporting acquisition oversight, accountability, and decision making throughout the Department for effective and efficient delivery of warfighter capabilities. AV began as a concept in early 2008 with a demonstration of data governance and Service Oriented Architecture to support major weapons system decision-making.

Five years later, the technology framework and governance process has solidified, providing the Defense Acquisition Community with a capability that supports management of Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) programs. It is a capability that:

- Captures acquisition data from the Military Departments and the Office of the Secretary

of Defense (OSD);
- Federates that data through a single interface; and
- Publishes this information through web-services where a customer can access the appropriate information for his or her reporting or tracking requirements.

Currently, over 180 data elements are used to provide acquisition system information that is compartmentalized into seven major categories: earned value management, unit cost, budget, milestones, sustainment, science and technology, and program administration. AV is now entering into a phased-production environment and working to increase the number of data elements (totaling approximately 500) available to the AV capability which will bring additional, relevant data to our decision makers.

AV continues to mature in providing a range of value-added data services supporting acquisition management and oversight. Objectives are to:

- Expand the use and functionality of AV Capabilities;
- Automate data quality validation and verification processes;
- Align technically to the strategic goals of the DoD's Chief Information Officer;
- Provide additional program coverage;
- Provide an acquisition documentation repository; and
- Encompass a range of relevant data sets to support acquisition management and oversight.

Questions regarding the AV project should be directed to the Office of Enterprise Integration and OSD Studies (within the Office of the Director, Acquisition Resources and Analysis).

10.13.1. Defense Acquisition Management Information Retrieval (DAMIR)

The Defense Acquisition Management Information Retrieval (DAMIR) system creates a net-centric environment to provide data transparency of acquisition management information to the Department of Defense. DAMIR provides:

- Full web-services data exchange with Components' acquisition information systems for Defense Acquisition Executive Summary (DAES) information and Program/Budget Review (P/BR) (formerly known as the Program Objective Memorandum (POM)) information;
- web applications that allow Components to input Selected Acquisition Report (SAR), Acquisition Program Baseline (APB), Major Automated Information System (MAIS) Annual Report (MAR), and the DAES data, making DAMIR the authoritative source for the SAR, APB, and MAR information;
- Analytical tools that enable users to customize the way they search, view, and display previously unavailable combinations of information electronically; and
- Workflow and collaboration capabilities.

Based upon an Office of the Secretary of Defense enterprise decision, use of the DAMIR system is mandatory for all Major Defense Acquisition Programs (MDAPs) and all MAIS programs and

must be employed to satisfy statutory requirements for SAR and MAR submissions and the APB. Non-MDAP and non-MAIS programs may also use the system.

The Director, Acquisition Resources and Analysis, has responsibility for the development, upgrade, and maintenance of the DAMIR system. The DAMIR system includes instructions for preparing the APB, the SAR, the MAR, the DAES, the Unit Cost Report, and the P/BR submission (referred to in the DAMIR system as POM), including administrative procedures. User help can be obtained through the following sources:

- DAMIR public web site (www.acq.osd.mil/damir)
- DAMIR hotline (703-679-5345)

DAMIR mailboxes (damir@caci.com for technical and functional support or damir@osd.mil for account administration support)

10.13.1.1. Defense Acquisition Management Information Retrieval (DAMIR) Acquisition Program Baselines (APBs)

The DAMIR system is the authoritative source for all APBs. APBs for Acquisition Category (ACAT) I and IA programs must be created and released using the DAMIR system. The DAMIR system provides the data entry capability and required workflow to create and edit an APB. An APB is approved within the DAMIR system when a formal signature page with the Milestone Decision Authority's signature is acquired--at this point, the APB can no longer be edited. The APB Objectives and Thresholds will also be visible within both the Selected Acquisition Report and Defense Acquisition Summary (DAES) views in the DAMIR Purview Program View module. The full Web Services data exchange with the Components acquisition information systems: Army (Acquisition Information Management), Navy (Dashboard), and Air Force (System Metric and Reporting Tool) also allows the Components to pull the official APBs into their respective systems to use in their respective DAES processes.

10.13.1.2. Defense Acquisition Management Information Retrieval (DAMIR) Selected Acquisition Reports (SARs)

The DAMIR system is the authoritative source for SARs and provides the data entry capability and required workflow to create and edit a SAR. The computational model capability is also integrated into the DAMIR SAR module. DAMIR provides extensive data checks, ensuring that a SAR is not released to Congress with critical errors. [**NOTE:** Acquisition Program Baseline (APB) values are pulled from the APB module and cannot be edited within the SAR.] All Major Defense Acquisition Programs are required to use DAMIR to prepare the annual and quarterly SARs. Hard copy SARs are no longer submitted to Congress. Instead, Congress is granted access to the SAR information through DAMIR. The only exception is when the SAR contains classified information. In those few cases, a hard-copy classified annex is submitted.

10.13.1.3. Defense Acquisition Management Information Retrieval (DAMIR) Major Automated Information System (MAIS) Annual Reports (MARs)

The DAMIR system is the authoritative source for MARs and provides the data entry capability and required workflow to create and edit a MAR. All MAIS programs are required to use the DAMIR system to prepare the annual MARs. The DAMIR MAR Module supports both Baselined and Unbaselined MAIS programs. The DAMIR system provides extensive data checks, ensuring that a MAR is not released to Congress with critical errors. Historical MARs (December 2008 December 2010) will be stored in PDF format in DAMIR *Acquisition Documents* .

For Baselined MARs, a MAR Original Estimate (OE) module is provided; the MAR OE will be automatically pulled into the MAR by the DAMIR system. The MAR OE can be initialized from the APB. Hard copy MARs are no longer submitted to Congress. Instead, Congress is granted access to the MAR information through the DAMIR system.

10.13.1.4. Defense Acquisition Management Information Retrieval (DAMIR) Defense Acquisition Executive Summary (DAES)

To improve information sharing and to reduce duplicate data entry, DAES information is now obtained either via Web Services data exchange between the Components' acquisition information systems and the DAMIR system or directly via the DAMIR *Create or Edit DAES Report* module. Major Automated Information System programs that are not Component-specific must enter all DAES information directly into the DAMIR system. (The action in the data exchange between the DAMIR system and the Component systems is referred to as a push; DAES data is pushed to the DAMIR system via Web Services on a monthly/quarterly basis.) DAES information is required to be submitted for all Acquisition Category (ACAT) I and IA programs using one of the previously mentioned collection methods.

Acquisition Program Baseline (APB) values displayed in the DAES/Web Services view are pulled directly from the APB module and cannot be updated via web services. In addition to the Currently Approved APB Objectives and Thresholds, for reference only, the DAMIR DAES submission will also show the Initial Phase Objectives and Thresholds, if applicable.

Office of the Secretary of Defense (OSD) Assessments against the quarterly pushed Program Managers Assessments are created in the DAMIR *DAES Review* module. Each organization has the ability to rate a program on any of the eleven indicators. OSD Assessments are visible in the DAMIR system the month after the Program Managers assessments are submitted.

Two unclassified supplemental Microsoft Word Power Point briefing slides (Issues Summary and Risk Summary.) must be submitted with the quarterly DAES submission. For those programs selected to be on the monthly DAES Meeting Agenda, an additional eleven slides must also be submitted. The list of thirteen (total) required slides is:

1. Program Information
2. Overview
3. Issues/Help Needed
4. Schedule
5. Cost and Quantity
6. Quad Chart
7. Earned Value
8. Risk Summary
9. Interrelationships, dependencies, and Synchronization with Complementary Systems
10. Sustainment
11. Better Buying Power
12. International Program Aspects
13. O&M and O&S Crosswalk Chart

When received, these slides are loaded into the DAMIR *Acquisition Document* module by the DAMIR administrative support staff. Access to DAES information is based on approved permissions.

10.13.1.5. Defense Acquisition Management Information Retrieval (DAMIR) Ad hoc Reports

The DAMIR *Ad hoc Report* s module provides a capability for cross-program analysis. Access to completed reports is permission based, but all users have access to SARs and SAR Ad hoc reports.

Users may request a report, or a query, of the DAMIR system database by sending an e-mail message to damir@osd.mil . Results from report requests will be added to the long-standing Ad hoc report list; results from queries are a one-time data dump into an excel spreadsheet and will not be turned into an ad hoc report unless specifically requested.

10.13.1.6 Defense Acquisition Management Information Retrieval (DAMIR) Portfolio View

The DAMIR *Portfolio View* module provides a cross-program analytical capability much like that of the DAMIR *Ad hoc Reports* module with the addition of graphical representations of the data. The DAMIR system software presents both dashboard and detailed views of Selected Acquisition Report data or Defense Acquisition Executive Summary data in the form of tables, charts, and graphs. The data presented in these views is based on portfolios of identified programs. The DAMIR system supports several standard portfolios that are accessible to all users. The standard portfolios allow the user to view data for all programs or for only those programs related to a specific Component. Users are also able to create personal portfolios that reference only specific programs that they identify. Any of these portfolios may then be used to create the portfolio views relevant to these programs. The DAMIR *Portfolio View* module also allows the user to customize their dashboard views uniquely, so that the user is presented with only those charts and graphs which are most useful to their inquiry. The ability to see draft and unofficial information is permission-based.

10.13.1.7. Integrated Program/Budget Review Data Submissions

During the first phase in the annual budget cycle, the Office of the Director, Cost Assessment and Program Evaluation (D, CAPE) and the Office of the Under Secretary of Defense (Comptroller) (USD(C)) are responsible for conducting an annual Integrated Program/Budget Review (P/BR) on all Department of Defense (DoD) resources and require an annual Integrated Program/Budget data submission from all DoD Components.

The Components are also required to submit supplemental Program/Budget Review (P/BR) data on their Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) programs. This supplemental submission of MDAP and MAIS data supports the efforts of the MDAP transparency study initially directed in the Fiscal Year 2011 Integrated Program Review Resource Management Directive 700 study and provides the details necessary to assess the status of programs.

Data shall be submitted for all current MDAPs and MAIS programs, as well as acquisition program concepts and Unbaselined MAIS programs that will achieve Milestone B prior to the end of the calendar year, or have been certified under the provisions of section 2366a of title 10 United States Code . The MDAP and MAIS program data shall include all acquisition costs (RDT&E, Procurement, MILCON, Acquisition O&M, Working Capital Funds, or Other Financing with an explanation) and MDAP quantities (RDT&E and Procurement) for the full acquisition cycle of each MDAP and each MAIS program (by fiscal year and funding appropriation). For MAIS programs, the total life-cycle cost is the development cost plus ten years of Operation and Support (O&S) costs following Full Deployment declaration. For MDAP programs, the full acquisition lifecycle and associated funding is defined by the D, CAPE and USD(C) annual Integrated Program/Budget Submission Guidance.

All MDAPs and MAIS programs shall submit annual P/BR data that has been coordinated with and approved by the appropriate Component Acquisition Executive (CAE) into their Components acquisition information system. For efficient information sharing, the CAE systems shall publish P/BR data to Acquisition Visibility (AV) using the Defense Acquisition Management Information Retrieval (DAMIR) system Web Services. Components without access to one of the Component acquisition information systems shall use the DAMIR *Create or Edit a Budget Report* module. Notwithstanding the method of transmission, exposure, or publication, the CAE-approved P/BR data shall be available for consumption by AV and AV subscribers as determined by annual guidance.

All MDAPs shall submit P/BR data at the sub-program level and all MAIS programs shall submit at the increment level as appropriate, consistent with the Track-to-Budget rules established for the data submission to the Program Resources Collection Process (PRCP), per the program/budget transparency requirements of the Fiscal Year Integrated Program/Budget Submission Guidance.

MDAPs and MAIS programs whose schedules have changed due to funding and quantity changes in the P/BR submission shall report estimated program schedule changes. A limited number of large MDAP and MAIS programs may be required to provide P/BR revision data

periodically during the Integrated P/BR. For programs so designated, revisions driven by the MDAP Issue Review Team or by any other direction shall cover the same data included with the original transmission and will be maintained by the responsible Component.

Components shall also review their acquisition program budgets, and ensure RDT&E Program Element funding is reflected in the RDT&E budget activity that aligns with the program's acquisition phase as defined in DoD Instruction 5000.02.

10.14. Special Interest Programs

10.14.1. Major Defense Acquisition Program (MDAP) or Special Interest Programs

10.14.2. Major Automated Information System (MAIS) or Special Interest Programs

10.14. Special Interest Programs

A program, or a technology project that will result in a program, has special interest if it has one or more of the following factors: technological complexity; Congressional interest; a large commitment of resources; the program is critical to achievement of a capability or set of capabilities; the program is part of a system of systems; or the program is a joint program. Generally, the level of funding, desired oversight and reporting will determine the Milestone Decision Authority and whether or not the program is designated a "Special Interest" program.

Programs that already meet the dollar thresholds for a Major Defense Acquisition Program (MDAP) may not be designated Special Interest programs.

10.14.1. Major Defense Acquisition Program (MDAP) or Special Interest Programs

If a program meets one of the MDAP dollar thresholds (per section 2430 of title 10, United States Code), then the program is automatically an MDAP. If the program is below the dollar threshold for designation as an MDAP, the Defense Acquisition Executive (DAE) may still choose to designate the program an MDAP if he or she deems oversight with statutory reporting is needed. An MDAP is designated ACAT I and it’s oversight comes from the DAE. The DAE can either retain MDA or delegate it to a Component Head or Component Acquisition Executive (CAE). If the DAE retains MDA, the program is an ACAT ID program. If the DAE delegates MDA to the Component Head or CAE, then the program is an ACAT IC program. As an MDAP, the program must meet all statutory reporting requirements for MDAP programs.

If the DAE desires oversight of a program that falls below MDAP dollar thresholds, and deems that statutory reporting associated with MDAPs is not needed, the program is designated a Special Interest Program. If the DAE retains MDA, the program is an ACAT ID Special Interest program. If the DAE delegates MDA to the Component Head or CAE, then the program is an ACAT IC Special Interest program. The CAE may also designate programs that are ACAT II or below as CAE Special Interest Programs.

For such Special Interest programs, the reporting requirements are tailored to meet the specific

oversight needs and must be captured in an Acquisition Decision Memorandum.

Table 10.14.1.T1 MDAP & Special Interest Designations & Decision Authorities

MDAP and Special Interest Designations & Decision Authorities			
Designation	**MDA**	**Funding Level**	**Information & Reporting**
ACAT ID MDAP	DAE	MDAP	MDAP
ACAT IC MDAP	CAE	MDAP	MDAP
ACAT ID Special Interest	DAE	Less than MDAP	Less or equal to MDAP
ACAT IC Special Interest	CAE	Less than MDAP	Less or equal to MDAP

10.14.2. Major Automated Information System (MAIS) or Special Interest Programs

If an Automated Information System (AIS) program meets one of the dollar thresholds for it to be designated a MAIS, then the program is automatically a MAIS program. If an Acquisition Information System (AIS) program falls below the MAIS dollar thresholds, the Defense Acquisition Executive (DAE) may still designate the program a MAIS program if he or she deems that oversight with statutory reporting is needed. A MAIS program is designated ACAT IA and the Milestone Decision Authority (MDA) is the Defense Acquisition Executive (DAE) or the person within OSD to whom the DAE delegates MDA. If the MDA remains within OSD (with the DAE or delegated MDA within OSD), the program is an ACAT IAM program. If MDA is delegated to the Component Head or CAE, then the program is an ACAT IAC program. A MAIS program must meet all statutory reporting requirements for MAIS programs.

If the DAE desires oversight of an AIS program, but deems that the statutory reporting associated with MAIS programs is not needed, the program is designated a "Special Interest" program. If MDA remains within OSD (DAE or DAE delegated MDA within OSD), the program is an ACAT IAM Special Interest program. If MDA is delegated by the DAE to the Component Head or CAE, then the program is an ACAT IAC Special Interest program.

For such Special Interest programs, the reporting requirements are tailored to meet the specific oversight needs and must be captured in an Acquisition Decision Memorandum.

Table 10.14.2.T1 MAIS & Special Interest Designations & Decision Authorities

MAIS and Special Interest Designations and Decision Authorities			
Designation	MDA	Funding Level	Information & Reporting
ACAT IA MAIS	DAE or OSD	MAIS	MAIS
ACAT IAC MAIS	CAE	MAIS	MAIS

ACAT IAM Special Interest	DAE or OSD	Less than MAIS	Less or equal to MAIS
ACAT IAC Special Interest	CAE	Less than MAIS	Less or equal to MAIS

10.15. Relationship of Affordability and Should-Cost

10.15.1. Affordability as a Requirement

10.15.1.1. Affordability Analysis

10.15.2. Should-Cost

10.15.2.1. Annual Should-Cost Progress Reporting

10.15.2.2. Should-Cost Information for Defense Acquisition Board (DAB) Preparation

10.15. Relationship of Affordability and Should-Cost

For product development programs, some understandable confusion exists as to how to implement both affordability as a requirement and should-cost, particularly early in a programs life cycle before Engineering and Manufacturing Development and Production. The two are compatible, but must be balanced differently across the product life cycle. The emphasis, prior to Milestone B approval for a program, should be on defining and achieving affordability targets. Past that point, the emphasis shifts to defining and achieving should-cost estimates.

10.15.1. Affordability as a Requirement

Affordability as a requirement directs that we establish quantified goals for unit production cost and sustainment coasts for our products, driven by what the Department or Component can afford to pay. These goals should be set early and used to drive design trades and choices about affordable priorities.

The Milestone Decision Authority (MDA) considers affordability at all major decision points of an acquisition program. In part, this consideration ensures that sufficient resources (funding and manpower) are programmed and budgeted to execute the program acquisition strategy. The MDA also examines the realism of projected funding over the programming period and beyond, given likely DoD Component resource constraints.

10.15.1.1. Affordability Analysis

Affordability Analysis is based upon the budgets we expect to have for the product over its life cycle and provides a design constraint on the product we will build, procure, and sustain. When the Department, i.e., the Milestone Decision Authority (MDA), establishes the affordability requirement, it represents a metric that captures the products expected capability against its

expected (affordable) life cycle cost. From this point on, any future unit or sustainment cost increase above those levels, whatever the cause, must come back to the MDA and to the user to determine what requirements can be dropped to stay within the affordability requirement, or-if the program must be terminated. For further discussion of affordability and affordability assessments, see 3.2 .

10.15.2. Should-Cost

Should-cost asks us consciously to do something different. It asks us to continuously fight to lower all of our costs, wherever that makes sense. Should-cost is a tool to manage all costs throughout the lifecycle, and it operates in parallel with the effort to constrain our requirements appetites in order to control the final product unit and sustainment costs. Should-cost is focused on controlling the cost of the actual work that we are doing and expect to do. In particular, should-cost estimates inform our negotiations with industry over contract costs and incentives. The should-cost approach challenges us to do our best to find specific ways to beat the Independent Cost Estimate (ICE) or Program Estimate (which should already reflect the affordability requirements) and other cost projections funded in our budgets (i.e., will-cost), when we find sensible opportunities to do so. For example, should-cost does not mean trading away the long-term value of sound design practices and disciplined engineering management for short-term gain.

Should-cost can be applied to anything that we do and to any source of costs, including costs for services and internal government costs as well as contracted product costs. Should-cost targets are often stretch goals we expect our leaders to do their best to reach; we expect them to be based on real opportunities, but to be challenging to execute. Unlike affordability requirements, we do not expect them to always be achieved, but we do expect strong efforts to do so.

Should-cost and affordability can come into conflict early in programs, particularly before Milestone B, when an affordability requirement may have been defined based on expected budgets, but it is too early to define should-cost estimates for future production or sustainment of products because we have not yet defined the design. This is also the time when spending money on efforts to reduce future costs can have the biggest payoff. As a result, during the early stages of product development, the priority should be toward establishing affordability constraints and working to provide the enablers to achieve them in the ultimate design. In the early phases of programs, should-cost can still be constructively used to control program overhead and unproductive expenses and to generally reduce contracted development costs, but it should not keep us from making sound investments in product affordability. Prior to the pre-EMD Review or MS B, the ICE or Program Estimate for production and sustainment has not been finalized and any should-cost estimates for future production lots and sustainment would be premature. At that point, however, particularly if we are ready to ask for bids and negotiate low rate initial production prices, we need a should-cost estimate to inform negotiations. Once the requirements, design, and affordability goals are established and an CE or Program Estimate exists, then it is time to challenge the assumptions embedded in those analyses, formulate should-cost estimates for production and sustainment, and work to achieve those estimates.

10.15.2.1. Annual Should-Cost Progress Reporting

On April 22, 2011, the Under Secretary of Defense (Acquisition, Technology and Logistics) directed the Component Acquisition Executives to deliver an annual progress report on their Should-Cost implementation .

The annual report must list all Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) programs for which should-cost estimates have been established. It should describe the challenges and successes in implementing these initiatives for each program from the perspectives of the respective Program Executive Officers and Program Managers, especially with regard to the programs the Services selected as models for Should-Cost implementation. The report should also describe the incentive plans the Service/Component has developed for Program Managers to reinforce and reward commitment to the Will-Cost and Should-Cost Management process.

Additionally, each Component should submit a Should-Cost datasheet for each MDAP and MAIS program that has established a Should-Cost estimate. The datasheet template is to be used as a guide and may be tailored to better present relevant information.

Questions regarding the annual Should-Cost Report may be directed to the Deputy Director, Resource Analysis in the Office of the Director, Acquisition Resources and Analysis.

10.15.2.2. Should-Cost Information for Defense Acquisition Board (DAB) Preparation

Information regarding the programs should-cost efforts must be included in material prepared for presentation to the Overarching Integrated Product Team (OIPT), the DAB Planning Meeting, the DAB Readiness Meeting, and the DAB Review. See the current Should-Cost Template for guidance.

10.16. Acquisition Program Transition Workshops (APTW)

10.16.1. Acquisition Program Transition Workshop (APTW) Purpose and Objectives

10.16.2. Acquisition Program Transition Workshop (APTW) Execution

10.16. Acquisition Program Transition Workshops (APTW)

General . Acquisition Program Transition Workshops (APTWs) are intended to provide timely and tailored assistance to Acquisition Category (ACAT) ID, ACAT IAM, and select special interest government program managers in aligning the government/contractor team at critical points in the programs schedule. APTWs are neither reviews nor assessments. They are to be conducted for the program manager on a non-judgmental basis with any findings, conclusions and recommendations provided to only the government and industry program managers. The APTW should enhance both the government and industry program managers capability to successfully anticipate and resolve commonplace challenges as well as unanticipated issues that may arise throughout program execution. Flowing from this effort, the Defense Acquisition

University maintains a lessons-learned program for dissemination among all program teams to foster better program performance and increase the chance for successful program outcomes. As part of a governance effort, the offices of the Deputy Assistant Secretary of Defense (DASD) (Strategic & Tactical Systems), the DASD (Space & Intelligence), the DASD (Command, Control, Communications & Cyber), the Deputy Chief Management Officer, and the Service Military Deputies will collaborate on common threads and trends from completed APTWs, and adjust workshop content as required.

10.16.1. Acquisition Program Transition Workshop (APTW) Purpose and Objectives

The basic purpose, common goals, and common deliverables for the APTW process are listed below.

Basic Purpose. To achieve early alignment of government & industry teams, particularly at the Integrated Product Team level and with a product orientation.

Common Goals.

- Common Interpretation of Contract Requirements/Provisions
- Understanding/Alignment of Government & Industry Processes
- Understanding/Agreement on Program Risk Elements
- Understanding/Agreement on Integrated Product Team (IPT) Structure, Concept of Operations, Authority

Common Deliverables.

- Integrated Baseline Review (IBR) Roadmap/Preliminary or Critical Design Review Roadmap (Major Goals)
- Agreement on Program Management Review Scope & Processes
- Joint Understanding of Program Scope & Configuration Management
- Resolution of Issues/Interpretation of Differences
- Commitment to Timely Communications and Transparency
- Actions Needing Further Consideration/Resolution

10.16.2. Acquisition Program Transition Workshop (APTW) Execution

It is strongly recommended that Program Managers of all Acquisition Category (ACAT) ID, ACAT IAM ,and special interest programs conduct an APTW with their Industry PM counterparts within the first few weeks following contract award or re-baseline action (such as those associated with Post Nunn-McCurdy certifications). Requests for workshops from other programs will be entertained as resources allow.

Program Managers should contact the Defense Acquisition University in a timely manner to facilitate the following planning and execution processes.

Draft Request for Proposal (RFP). As a DoDI 5000.02 defined Milestone or a major

transition/restart is approached, information regarding APTWs should be included in the RFP and Statement of Work. Acquisition Category (ACAT) ID and ACAT IAM Program Managers should address APTWs in their Draft RFP briefings to possible respondents.

Pre-Contract Award. The period prior to source selection and contract award is a particularly useful time for the government Program Manager to engage in APTW government team training and/or process development for contract execution.

Post Contract Award. In the first few weeks following contract award, program managers should coordinate with the industry program manager counterpart on actions that will result in a joint APTW within five weeks following contract award.