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Financial Management

COST ANALYSIS GUIDANCE AND PROCEDURES



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This instruction implements Air Force Policy Directive (AFPD) 65-5, Cost and Economics. It is consistent with established guidance in Department of the Air Force Instruction (DAFI) 63-101/20-101, Integrated Life Cycle Management; Department of Defense (DoD) Directive (DoDD) 5000.01, The Defense Acquisition System; DoD Instruction (DoDI) 5000.02, Operation of the Adaptive Acquisition Framework; DoDI 5000.73, Cost Analysis Guidance and Procedures; DoDI 5000.74, Defense Acquisition of Services; DoDI 5000.75, Business Systems Requirements and Acquisition; DoDI 5000.80, Operation of the Middle Tier of Acquisition (MTA); DoDI 5000.85, Major Capability Acquisition; DoDI 5000.87, Operation of the Software Acquisition Pathway; DoDI 5000.91, Product Support Management for the Adaptive Acquisition Framework; DoDI 5000.93, Use of Additive Manufacturing in the DoD; DoD Manual (DoDM) 5000.04, Cost and Software Data Reporting; and with Title 10 United States Code (USC) §§ 3221-3227; 10 USC § 3501; 10 USC §§ 4251-4253; 10 USC § 4323; 10 USC § 4328; 10 USC §§ 4376-4377 and Public Law 111-23, Weapon Systems Acquisition Reform Act (WSARA) of 2009. This publication applies to the Department of the Air Force, including the United States Space Force and United States Air Force. This publication does not apply to Air Force Reserve Command, Air National Guard, and Civil Air Patrol units. It establishes timelines, documentation requirements, and review procedures for all cost estimates, and provides specific instructions on performing cost analyses. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction (AFI) 33-322, Records Management and Information Governance Program, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Refer recommended changes and questions about this publication to the office of primary responsibility (OPR) using the Department of the

Air Force (DAF) Form 847, *Recommendation for Change of Publication*; route DAF Form 847s from the field through the appropriate functional chain of command. This publication may be supplemented at any level, but all Supplements must be routed to the OPR of this publication for coordination prior to certification and approval. The authorities to waive wing/unit level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See DAF Manual (DAFMAN) 90-161, *Publishing Processes and Procedures*, Table A10.1., for a description of the authorities associated with the Tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the publication OPR for non-tiered compliance items.

SUMMARY OF CHANGES

This document has changed substantially and must be reviewed in its entirety. This publication has changed from an AFI to a DAFI. It has been revised to account for the establishment of the United States Space Force (USSF) within the Department of the Air Force and updates references to Department of Defense and Department of Air Force policies. Included are changes to cost estimating requirements for the Adaptive Acquisition Framework and Cost and Software Data Reporting (CSDR) requirements. Additionally, Section 802 and 1812 of the Fiscal Year 2021 National Defense Authorization Act (NDAA) made Title 10 USC revisions applicable to this instruction.

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OVERVIEW, ROLES, AND RESPONSIBILITIES

1.1. Overview.

- 1.1.1. Department of the Air Force (DAF) cost estimates support a wide range of activities. They provide the cost, technical, and programmatic analysis required to support key decisions within the requirements, planning, acquisition, programming, and budget processes as well as daily program management activities. These activities include affordability, design and budget trades, contract negotiations, contract performance measurement, program management reviews, requirements trades, and others. They are used to support multiple forms of comparative analysis and baseline reviews, including Analysis of Alternatives, Economic Analyses, make-or-buy decisions, source selections, proposal evaluations, and design/cost tradeoff analyses.
- 1.1.2. These cost estimates also support key decision points for acquisition programs to include acquisition milestone, event, and decision reviews; Strategy, Planning, Programming, Budgeting and Execution (SPPBE) reviews; sustainment reviews; DAF Corporate Structure decisions; Acquisition Program Baseline (APB) development; program unit cost breaches (commonly known as Nunn-McCurdy breaches); and critical change notifications.
- 1.1.3. This instruction focuses primarily on the types of cost estimates used in support of these decisions, their associated cost estimating requirements, and recommended processes. Specific requirements and processes for developing cost estimates to support comparative analyses can be found in AFI 65-501, *Economic Analysis*.

1.2. Roles and Responsibilities.

- 1.2.1. In accordance with Headquarters Air Force (HAF) Mission Directive (MD) 1-12, Assistant Secretary of the Air Force (Financial Management and Comptroller), the Assistant Secretary of the Air Force for Financial Management (SAF/FM) is responsible for managing and overseeing DAF cost estimating, cost analysis, cost reporting, and financial statistical programs and analysis.
- 1.2.2. In accordance with HAFMD 1-12 and the delegated authorities from the SAF/FM, including analyses and assessments at all classification levels (i.e., unclassified, secret, top secret, special access, etc.), the Deputy Assistant Secretary for Cost and Economics (SAF/FMC), and as the appointed Executive Director of the Air Force Cost Analysis Agency (AFCAA), will:
 - 1.2.2.1. Develop and administer cost policy and guidance; standards and templates; training, education, and professional certification programs; analyst qualification criteria; and cost estimating performance and budget risk metrics. Participate in cost and technical data collection efforts; develop cost estimating methods and model development projects; maintain a historical cost database; and provide support to other DAF functional organizations.
 - 1.2.2.2. Conduct and approve Service Cost Positions (SCPs) and Non-Advocate Cost Assessments (NACAs); develop Independent Cost Estimates (ICEs); review program cost estimates; and approve waivers for Program Office Estimates (POEs) exceeding

- acquisition category (ACAT) I or equivalent thresholds and NACAs in coordination with the Assistant Secretary of the Air Force for Acquisition, Technology & Logistics (SAF/AQ), Assistant Secretary of the Air Force for Space Acquisition and Integration (SAF/SQ), or their delegated Program Executive Officer (PEO).
- 1.2.2.3. Review and comment on technical propriety and sufficiency of any cost analysis (whether developed by the major command (MAJCOM)/field command (FLDCOM), direct reporting unit (DRU), acquiring organization, or DAF organization) when the analysis will be presented to DAF leadership, Office of the Secretary of Defense (OSD), Office of Management and Budget (OMB), or Congress.
- 1.2.2.4. Coordinate support for issue teams and full funding support certifications. Further details for Major Defense Acquisition Program (MDAP) Program Review Teams (formerly known as Issue Teams) and the process involved is in **paragraph 1.3** of this instruction.
- 1.2.2.5. Serve as the DAF Corporate Cost Advisor by integrating cost analysis and estimating products into the SPPBE processes. Maintain cost risk and opportunity assessments across the budget portfolio and provide cost and economic analyses to decision-makers for completion of the Program Objective Memorandum (POM).
- 1.2.3. SAF/AQ and/or SAF/SQ send an appropriate representative to:
 - 1.2.3.1. Coordinate on the completion of program cost estimates.
 - 1.2.3.2. Coordinate on the selection of cost estimates to be completed each year by SAF/FMC.
 - 1.2.3.3. Coordinate on the completion of full funding certifications.
 - 1.2.3.4. Coordinate on annual cost estimate waivers.
 - 1.2.3.5. Notify SAF/FMC of any Program Review Team documentation requests.
 - 1.2.3.6. Participate in the Cost Review Board (CRB).
 - 1.2.3.7. Periodically provide a list of all MTA programs to SAF/FMC. Upon MTA declaration and periodically thereafter, for purposes of life cycle cost estimate requirements delegation determination, each MTA program submits the following information:
 - 1.2.3.7.1. Dollar threshold level and acquisition decision authority level for each MTA.
 - 1.2.3.7.2. Descriptions of any concurrent programs connected to the ultimate system/capability delivery from the MTA's purpose/goals/requirements (e.g., concurrent rapid prototyping for avionics modification/install kit and rapid fielding for the unmodified aircraft, or concurrent MTAs for payload and satellite, or for ground system and the unmanned aerial vehicle, or two sequential but overlapping rapid prototyping ground radar sites and a rapid fielding program for the third site).
 - 1.2.3.7.3. The potential follow-on program plan if the MTA is successful.
- 1.2.4. Deputy Chief of Staff for Strategic Plans and Programs (AF/A8) and/or Deputy Chief of Space Operations for Strategy, Plans, and Programs (SF/S8) and/or Deputy Chief of Space Operations for Intelligence (SF/S2) as applicable:

- 1.2.4.1. Coordinate in support of the POM build on the selection of NACAs to be completed each year by SAF/FMC.
- 1.2.4.2. Participate in the CRB.
- 1.2.5. Program Executive Officers (PEOs):
 - 1.2.5.1. Through their Program Managers, be responsible for establishing and updating cost estimates in accordance with AFPD 65-5, *Cost and Economics*; AFMAN 65-502, *Inflation*; DAFI 65-508; and AFMAN 65-506, *Economic Analysis*.
 - 1.2.5.2. Provide Program Manager (PM) approved POEs and cost estimate waivers for active acquisition and sustainment programs to their respective Center Cost Chief or other delegated authority for annual review and final approval.
 - 1.2.5.3. Support further analysis as needed for operating and support (O&S) cost estimates and/or sustainment reviews.
 - 1.2.5.4. Request, if necessary, assistance from Center Cost Staff to establish or update program cost estimates if they do not have sufficient cost support.
 - 1.2.5.5. Approve Cost Analysis Requirements Descriptions (CARDs) to be complete and accurate IAW Department of Defense Instruction (DoDI) 5000.73.
 - 1.2.5.6. Provide an updated cost and schedule estimate approved by the Center Cost Staff for any program restructure that requires the Milestone Decision Authority (MDA) or Defense Acquisition Executive (DAE) / Service Acquisition Executive (SAE) approval.
- 1.2.6. Center Cost Chief, or delegated authority, will:
 - 1.2.6.1. Review, and be approval authority with PM coordination for, POEs.
 - 1.2.6.2. Be approval authority for annual POE waivers for acquisition pathway programs below ACAT I / ACAT I equivalent thresholds.
 - 1.2.6.3. At Center Cost Chief discretion, prepare or update POEs as requested if PEO does not have sufficient cost support.
 - 1.2.6.4. Prepare a life cycle cost estimate when directed by SAF/FMC. (T-1)
 - 1.2.6.5. For programs not estimated by AFCAA, Acquisition Centers are responsible for implementing the roles and responsibilities as defined in **paragraph 1.2.2.5**, with Center Cost Staff supporting the MAJCOM/FLDCOM POM process by emulating SAF/FMC processes that support development of the HAF POM. When requested, the Cost Center Staff would also support the HAF POM process.
- 1.2.7. MAJCOMs/FLDCOMs, Field Operating Agencies, and DRUs will:
 - 1.2.7.1. Establish and maintain cost, economic, and financial management expertise to support the resource allocation and acquisition processes; training, education, professional development, and certification programs.
 - 1.2.7.2. Develop knowledge management tools. (T-1)
- 1.2.8. The Financial Manager for Space Systems Command (SSC/FM) fulfills both roles of Center Cost Chief and FLDCOM and will not delegate any Center Cost Chief authorities without approval from SAF/FMC. (T-1)

1.3. OSD Program/Budget Review Team Support.

- 1.3.1. Annually, the Under Secretary of Defense (Comptroller) and Office of the Secretary of Defense, Cost Assessment and Program Evaluation (OSD CAPE) publish joint guidance for the conduct of the Integrated Program/Budget Review (https://guidanceweb.ousdc.osd.mil/Budget Formulation.aspx). This process entails reviewing Title 10 United States Code (USC) §§ 4251-4253 certification status of MDAPs during the Program/Budget Review process.
- 1.3.2. The Program/Budget Review is conducted after the Service POM is submitted, and the outcome of these reviews is an OSD-directed change to the Component POM and Budget Estimate Submission positions. Program Review Teams are formed to lead an evaluation of selected issues by their leadership; membership on these teams include representatives from OSD, the Joint Staff, and members from each of the Military Departments and Defense Agencies. Once issue nominations are identified and formally approved, they are vetted through the OSD-led issue team.
- 1.3.3. In support of these reviews, OSD CAPE requests updated Component estimates to assess full-funding of acquisition programs which will be discussed during the Program/Budget Review processes. Once candidate programs have been identified, OSD CAPE provides the list of DAF programs to the Cost Integration and Policy Division (SAF/FMCC). The expectation is that SAF/FMC, upon request, provides documentation on all cost estimates used to support development of the POM, and that SAF/AQ or SAF/SQ Program Element Monitors (PEMs) provide required Acquisition Decision Memorandum direction, funding profiles, the most current cost estimate, and current certification status.
- 1.3.4. SAF/FMCC collaborates with the Deputy Assistant Secretary (Acquisition Integration) (SAF/AQX), the Assistant Secretary for the Air Force Space Acquisition and Integration, Integration Directorate (SAF/SQX), and the appropriate AF/A8 and SF/S8 panels to ensure NACAs are representative of approved Service POM strategies prior to submitting the estimates and justification narratives to OSD CAPE. Final adjudication of full-funding and program or budget issues is vetted through the respective Program Review Teams to determine the appropriate resolution.

DEPARTMENT OF THE AIR FORCE ESTIMATES AND ACQUISITION PATHWAYS

2.1. Purpose.

- 2.1.1. Cost estimates are vital to providing leadership with critical information for program decisions, establishing executable budgets, and proactively addressing financial issues. Cost estimates are used to ensure timely, relevant, and credible cost analysis is available to support Milestone or Authority-to-Proceed (ATP) decisions; SPPBE resourcing decisions; contracting processes and decisions; APB updates; program breach and/or program restructure decisions; and the Department's Corporate Structure POM build. All estimates created to support the DAF POM build must be documented and provided to AFCAA, SAF/FMC, SAF/AQ and SAF/SQ PEMs, SF/S8 and AF/A8 for review prior to inclusion in the applicable budget cycle. AFCAA is then responsible for working with OSD CAPE to populate their database of documented cost estimates. (T-1)
- 2.1.2. SAF/FMC works within the corporate process to ensure all funding disconnects revealed by comparing the approved estimate to the budget are illustrated through a portfolio cost risk assessment provided to the Department's Corporate Structure as applicable.
- 2.1.3. All completed cost estimates must be led by a properly qualified member of the Armed Forces or full-time DoD employee. (**T-0**)
 - 2.1.3.1. For Acquisition Pathway Programs that exceed ACAT I thresholds, all completed cost estimates must be led by a Certified Acquisition Professional, who is maintaining a Business-Cost Estimating Advanced certification.
 - 2.1.3.2. For Acquisition Pathway Programs at the ACAT II and below thresholds, it is highly encouraged to assign a lead cost estimator that maintains at least a Business-Cost Estimating Practitioner certification.

2.2. Department of the Air Force Cost Estimates.

- 2.2.1. The DAF primarily develops four types of cost estimates: ICEs, SCPs, NACAs, and POEs. At least one of these types of cost estimates must be accomplished for all acquisition pathway program Milestone or Authority-to-Proceed (ATP) decisions; SPPBE resourcing decisions; contracting processes and decisions; APB updates; program breach; and/or program restructure decisions. (T-0)
- 2.2.2. Independent Cost Estimate (ICE).
 - 2.2.2.1. Per DoDI 5000.73, an ICE is a full life-cycle cost estimate of a program, including all costs of development, procurement, military construction, operations and support, disposal, and trained manpower to operate, maintain, and support the program or subprogram upon full operational deployment, regardless of funding source or management control. The estimate must include analysis to support decision making that identifies and evaluates alternative courses of action that may reduce cost and risk and result in more affordable programs and less costly systems. (T-0) The term *independent* refers to organizational and analytic independence. Organizational independence means that the cost estimate is prepared by an entity that is outside of any organization that would

provide undue influence over the estimate. Analytic independence means that the cost estimate is free of any bias or preconceived notions about the program's most likely cost.

- 2.2.2.2. The following statutes provide direction when an ICE is required:
 - 2.2.2.2.1. 10 USC § 3222 requires an ICE to be accomplished before a milestone decision authority may approve entry into a new acquisition phase (i.e., technology maturation and risk reduction, engineering and manufacturing development, and production and deployment phases).
 - 2.2.2.2. 10 USC § 3221 states the Director Cost Assessment and Program Evaluation (DCAPE) must accomplish ICEs for MDAPs and major subprograms in advance of Milestone A, Milestone B, Low-Rate Initial Production, Full-Rate Production decisions, and at any other time deemed appropriate by DCAPE.
 - 2.2.2.2.3. 10 USC § 4323 requires an ICE for a sustainment review of each covered system not later than five years after declaration of initial operational capability and every five years thereafter to assess the product support strategy, performance, and operation and support costs of the weapon system.
- 2.2.2.3. The Office of Cost Assessment (OSD CA) may elect to delegate the conduct of statutorily required ICEs to the respective Service Cost Agency (SCA). Thus, AFCAA is the only cost organization that will conduct an ICE for DAF programs. (T-0)
- 2.2.3. Service Cost Position (SCP).
 - 2.2.3.1. The SCP represents the DAF's official cost estimate and should cover the entire life cycle of the program and satisfies the requirement for a Component Cost Position (CCP) per DoDI 5000.73. The SCP is developed through the CRB process, as described in **Chapter 3**. This process is designed to be collaborative, combining inputs from all stakeholder cost organizations and a broad range of functional inputs. The SCP may also be developed through a tailored process at the discretion of SAF/FMC, as described in **Chapter 3**. A signed SCP and full funding certification must be provided to the DCAPE in accordance with DoDI 5000.73. (**T-0**) The SCP must be signed by SAF/FMC. (**T-0**)
 - 2.2.3.2. SCP for Joint Programs. Joint programs typically develop Joint Cost Positions for milestone decisions using the processes employed by the lead service. Joint programs where the DAF is the lead DoD Component will follow DAF cost policy and processes for all elements of the program (Chapter 3). (T-0) In these cases, DAF cost organizations will provide cost estimates for all common Program Elements and DAF unique elements. Other Services/Components' unique elements are typically estimated by their respective cost organizations and reviewed through the DAF cost processes. Joint programs where the DAF is not the lead Component follow the cost processes of the lead service for all common elements of the program. DAF unique elements require cost estimates and cost reviews per DAF policy and processes as outlined in Chapter 3. (T-1)
- 2.2.4. Non-Advocate Cost Assessments (NACAs).
 - 2.2.4.1. NACAs are completed by AFCAA, as the DAF independent cost organization. They include analysis of program cost/price, schedule, and technical risk. NACAs are primarily designed to support the requirements, strategy, planning, programming, and budget processes; acquisition milestone/event decisions/reviews; and Sustainment/Post-

- Initial Operating Capability (IOC) reviews. NACAs can range from a sufficiency review of an existing estimate to a comprehensive Life Cycle Cost Estimate. DAF panels, SAF/AQX, SAF/SQX, Program Management Offices (PMOs), and/or other interested parties inform the NACA selection process by feedback or request.
- 2.2.4.2. NACAs serve as the Component Cost Estimates (CCEs) when required by DoDI 5000.73. Each AFCAA Division Chief submits approved NACAs at a minimum to SAF/FMC; the appropriate Program Manager (PM) and PEO; MAJCOM/FLDCOM or DRU functional point of contact; SAF/AQ and SAF/SQ Program Element Monitor (PEM); SAF/AQX and SAF/SQX representative; and the Panel Chair.
- 2.2.4.3. NACAs become the ICE and are labeled as the ICE when OSD CAPE delegates authority to AFCAA.
- 2.2.4.4. NACAs for all acquisition pathways are required annually. The AFCAA Division Chief will request any NACA waivers and notify the PM since a POE and NACA waiver cannot be submitted for the same year. (T-1) Annual NACA waiver requests must be submitted each year by 30 January. (T-1) Waiver requests provided after 30 January may be considered for circumstances that could not have been anticipated. **Attachment 2** includes a waiver request template.
- 2.2.5. Program Office Estimates (POEs).
 - 2.2.5.1. POEs are developed by the PMO or may be the result of a collaborative effort between the PMO and the Center Cost Staff. POEs can range from an initial rough order of magnitude to a comprehensive Life Cycle Cost Estimate.
 - 2.2.5.2. Center Cost Chief, or delegated authority, is the approval authority for all POEs with PM coordination. Per USSF procedures and processes, these approved POEs are often called Single Best Estimates, or SBEs.
 - 2.2.5.3. POEs for all acquisition programs will be updated annually. (T-0)
 - 2.2.5.3.1. The PM is responsible for requesting annual POE waivers. A PM cannot submit a waiver request for a POE when a waiver request exists for a NACA for the same year. (T-1)
 - 2.2.5.3.2. SAF/FMC, with the coordination of SAF/AQ or SAF/SQ (or their delegated PEO), is responsible for approving annual POE waivers for acquisition pathway programs that exceed ACAT I thresholds. POE waiver requests for acquisition pathway programs that exceed ACAT I should be staffed to SAF/AQ or SAF/SQ (or delegated PEO) for concurrence and then submitted to SAF/FMC for approval.
 - 2.2.5.3.3. The Center Cost Chief (or delegated representative) is responsible for approving annual POE waivers for acquisition pathway programs below ACAT I thresholds with notification sent to SAF/FMC and the MAJCOM/FLDCOM FMC, where applicable.
 - 2.2.5.3.4. POE waiver requests must be submitted each year by 30 January. (**T-1**) Waiver requests provided after 30 January may be considered for circumstances that could not have been anticipated. **Attachment 2** includes a waiver request template.

2.2.5.4. Center Cost Chiefs will provide an annual report to SAF/FMC identifying programs that did not complete a POE or POE waiver to support the current POM cycle. (T-1) Reports will include PMO rationale for not completing the POE or POE waiver. (T-1)

2.3. Life Cycle Cost Estimate (LCCE) Requirements.

2.3.1. A LCCE encompasses total program life cycle costs. Most ICEs, SCPs, and POEs capture the requirements of an LCCE. Total program life cycle costs include sunk costs incurred from program initiation through disposal, and all costs associated with a decision to proceed with the program. LCCEs are comprehensive and address all relevant programmatic, technical, and financial issues. Insight into cost drivers and their effect on life cycle costs should be provided, and estimates should be structured to be responsive to program changes and associated requirements for cost estimate excursions. LCCEs should be fully documented (as described in **Chapter 6**) to the level that a qualified cost estimator could recreate the estimate.

2.3.1.1. Life Cycle Cost Estimates must include:

- 2.3.1.1.1. All Program Acquisition and O&S costs including costs funded by all applicable appropriations including Research Development Test and Evaluation (RDT&E), Procurement, Military Construction (MILCON), Operations and Maintenance (O&M), and Military Personnel, regardless of funding source or management control (reference 10 USC § 3222). (**T-0**)
- 2.3.1.1.2. All sustainment and disposal costs. (T-0)
- 2.3.1.1.3. All applicable Restoration and Modernization costs associated with facility and infrastructure sustainment, MILCON, and O&M appropriation funds. (**T-0**)
- 2.3.1.1.4. All contractor and government costs. (**T-0**)
- 2.3.1.1.5. Costs associated with all applicable Work Breakdown Structure (WBS) elements (reference MIL-STD 881F, *Work Breakdown Structures for Defense Materiel Items*, for the typical WBS elements). (**T-0**)
- 2.3.1.1.6. Only when applicable to analysis purposes, LCCEs may include indirect elements, particularly those associated with sustainment or O&S costs, to ensure the capture of all relevant total ownership costs. Indirect costs associated with sustainment must meet requirements outlined in the OSD CAPE Operating and Support Cost-Estimating Guide. (T-0)
- 2.3.1.1.7. Costs displayed by acquisition program phase, consistent with those defined in DoDI 5000.02. (**T-0**)
- 2.3.1.1.8. A comprehensive risk/uncertainty analysis. (**T-0**) All acquisition program (e.g., acquisition category I/II/III, business category, rapid capability, etc.) cost estimates are developed, to the extent practicable, based on historical actual cost information that is based on demonstrated contractor and Government performance and that such estimates provide a high degree of confidence that the program or subprogram can be completed without the need for significant adjustment to program budgets. The estimates should consider cost, technical, and schedule risks; opportunities; and uncertainties in the analysis. Based on the risk/uncertainty analysis, the final

recommended cost estimate position (single point estimate presented to decision makers for decisions/reviews such as budget, POMs, APBs, Selected Acquisition Reports, etc.) should be established at the mean of the program cost estimate distribution (typically 55-65% confidence level). In circumstances where a distribution cannot be computed, the final recommended cost estimate position should be the average or expected value of the cost estimate. For more information on best practice cost risk and uncertainty analysis guidance, reference the March 2014 Joint Agency Cost Schedule Risk and Uncertainty Handbook.

- 2.3.1.1.9. Analysis to support decision making that identifies and evaluates alternative courses of action that may reduce cost and risk (i.e., optimal production quantities, testing iterations, or staffing). (T-0) This requirement is not a separate project or study from the cost estimate. Sources for the alternative courses of action to be evaluated should be identified and developed during the natural course of a cost estimate. The cost estimate should document if, during the development of the cost estimate, no alternatives were identified.
- 2.3.1.1.10. Schedule analysis incorporated with the cost estimate to include an assessment of risk, opportunities, and uncertainty associated with schedule variability. (T-0) A cost and schedule assessment help determine the impact of schedule delays on project cost estimates and program phasing.

2.4. Program Breach Cost Estimates.

- 2.4.1. Major Defense Acquisition Program (MDAP).
 - 2.4.1.1. When a cost estimate indicates an MDAP unit cost breach as defined in 10 USC § 4376 and § 4377, or an MDAP post-Milestone A breach, the PM must consider all current cost estimates and report the findings to the SAE. (**T-0**) The SAE should then report these findings to the Secretary of the Air Force who makes the final breach or program change determination.
 - 2.4.1.2. The SAF/FMC SCP should be used for breach reporting whenever possible. All MDAPs undergoing a critical breach certification to Congress require DCAPE concurrence on the Program Acquisition Unit Cost (PAUC) and Acquisition Procurement Unit Cost (APUC) estimates. In most cases, DCAPE requests a SAF/FMC SCP, documented through a SAF/FMC signed memorandum, to support their evaluation and recommendation to the Secretary of Defense (SECDEF). At a minimum, if an SCP is unavailable, the PM should expect OSD to request a SAF/FMC assessment of the basis of estimate for the re-baselined PAUC and APUC estimates as part of its reasonableness determination. The SCP (or ICE) will be used as the basis for all ACAT I APBs and any update to the estimate by an updated APB. (T-1)
 - 2.4.1.3. For significant Nunn-McCurdy breaches where the program will be re-baselined, an SCP should be used. At a minimum, a NACA is required for significant Nunn-McCurdy breaches.
 - 2.4.1.4. PMOs, the Center Cost Staff organizations, and AFCAA normally have a role in fulfilling program analysis and root cause analysis requirements outlined in DoDI 5000.73.
- 2.4.2. All Other DAF Acquisition Pathways.

2.4.2.1. The SAF/FMC SCP should be used for APB equivalent (e.g., Guardrail) breach reporting whenever possible. If the intent is to *re-baseline* the APB equivalent, an SCP should be used. At a minimum, if an SCP is unavailable, a NACA or a SAF/FMC assessment of the basis of estimate and reasonableness determination is required. Refer to **Table 2.2** through **Table 2.6** below.

2.5. Sustainment Review and O&S Estimates.

- 2.5.1. In support of post-IOC sustainment requirements identified in 10 USC § 4323, AFCAA will produce an ICE if delegated by OSD CA. (**T-0**) PMOs, Product/Logistic Center Cost Organizations, and AFCAA will have a role in fulfilling other analysis requirements for the sustainment reviews outlined in 10 USC § 4323. SAF/FMC will hold a kickoff meeting to define all organizational roles, responsibilities, and procedures to support cost estimates and cost analyses required for each post-IOC sustainment review. (**T-0**)
- 2.5.2. For MDAPs and major systems post-IOC, AFCAA will track and ensure the department completes updates of O&S cost estimates yearly per DoDI 5000.73. (**T-0**) SAF/AQ and/or SAF/SQ identifies MDAP and major systems which are post-IOC to support annual cost estimate tracking. The updated annual cost estimate requirement may be satisfied by a POE or cost estimate completed by AFCAA and informed by a POE. All POEs completed in support of this requirement will be submitted by the Center Cost Organization to AFCAA for record. (**T-1**)
- 2.5.3. The sustainment review ICE and/or SCP will follow the CRB process as tailored and determined by SAF/FMC. (**T-1**) SAF/FMC will summarize and document the estimate and relevant cost analysis findings in a memorandum provided to SAF/AQ or SAF/SQ as applicable, and SAF/FM. (**T-1**)

2.6. Cost Estimates to Support the Planning & Requirements Process.

2.6.1. Estimates prepared for the planning programs, where requirements are still undefined, should be reviewed by the Center Cost Staff per Center processes. Development planning estimates are provided to support concept planning and requirements development, and these estimates may not reflect the cost of a program once requirements and acquisition strategy are approved. AFCAA, upon request or at the direction of SAF/FM, supports development planning estimates by preparing, advising, or reviewing estimates going for decision or coordination through the headquarters requirements, programming, and planning processes; DAF Corporate Structure; or other Department Secretariat/Headquarters two-letter organizations.

2.7. Cost Estimates for Acquisition Pathways.

- 2.7.1. The following tables depict when and what type of estimates are required at specific program events. The following acquisition pathway programs are described:
 - 2.7.1.1. Major Capability Acquisition (MCA) **Table 2.1**.
 - 2.7.1.2. Middle Tier of Acquisition (MTA): Rapid Prototyping (RP) Table 2.2.
 - 2.7.1.3. Middle Tier of Acquisition (MTA): Rapid Fielding (RF) Table 2.3.
 - 2.7.1.4. Software Acquisition Table 2.4.
 - 2.7.1.5. Defense Business Systems (DBS) **Table 2.5**.

- 2.7.1.6. Defense Acquisition of Services (DAS) **Table 2.6**.
- 2.7.2. Urgent Capability Acquisitions which exceed any of the DAF MCA Category I equivalent thresholds require, at minimum, a POE. Further estimates are completed as needed or directed by DAF, OSD, or other higher headquarters.
- 2.7.3. Further information regarding estimates for programs within the previously mentioned acquisition pathways are detailed in **Attachment 5**.

Table 2.1. Major Capability Acquisition Pathway Program Estimate Requirements.

ACQUISITION PATHWAY	WHEN E STIMATE S ARE REQUIRED	CAPE ICE1	SCP ¹	NACA ¹	POE ²		
	Major D ecision Points (Milestones*, LRIP, & FRP Decisions)	0	•	•	•		
	Development Request For Proposals (RFP) Release	0		•	•		
	Critical Unit Cost Growth Breach (10 USC § 4376, also referred to as Critical Nunn-McCurdy Breach)	0	•	•	•		
	Significant Unit Cost Growth Breach (10 USC § 4375, also referred to as Significant Nunn-McCurdyBreach)			•	•		
	Post-IOC Sustainment Reviews	0		•			
DoDI 5000.85 Major Capability Acquisition	Post-IO C Annual O&S E stimate				•		
Acquisition	Annually and in Accordance with Local Policy			•	•		
	E STIMATE TYPE & APPROVAL AUTHORITY - ALL ACAT LE VE L THRE SHOLDS						
	CAPE ICE: DCAPE (SAF/FMC ifdelegated)						
	SCP or NACA: SAF/FMC						
	POE: Center Cost Chiefor Delegated Authority						
	1. For Programs likely to exceed ACAT I thresholds O CAPE conducts or approves an ICE 2. For all ACAT Programs Estimate required.						
	2. For all ACAT Programs • Estimate required *For pre/post MS B, pre/post MS C, MTA to MCA transition decisions, or other milestone variations when applicable, a NACA is required. AFCAA will also consider conducting an SCP to inform the MDA.						

Table 2.2. Middle Tier of Acquisition: Rapid Prototyping Pathway Program Estimate Requirements.

ACQUISITION PATHWAY	WHEN ESTIMATES ARE REQUIRED	CAPE Cost Estimate ¹	SCP ¹	NACA ¹	POE ²		
	Program Entrance (MTA Advisory Board)	0	0	•	•		
	Request For Proposals (RFP) Release			•	•		
	Pre-Contract Award		•	•	•		
DoD15000.80 Operation of the Middle	Other Major Decision Point (e.g., MTA Advisory Boards)	0	0	•	•		
Tier of Acquisition (MTA)	Annually and in Accordance with Local Policy			•	•		
Rapid Prototyping (RP)	ESTIMATE TYPE & APPROVAL AUTHORITY - ALL ACAT LEVEL THRESHOLDS						
, , , , , , , , , , , , , , , , , , , ,	CAPE Estimate of Costs: DCAPE (SAF/FMC if delegated)						
	SCP or NACA: SAF/FMC						
	POE: Center Cost Chief or Delegated Authority						
	For MTA RP Programs likely to exceed ACAT I thresholds For all MTA RP Programs	CAPE conducts or approves an estimate of costs; SCP may be conducted Estimate required					

Table 2.3. Middle Tier of Acquisition: Rapid Fielding Pathway Program Estimate Requirements.

ACQUISITION PATHWAY	WHEN ESTIMATES ARE REQUIRED	CAPE LCCE ¹	SCP ¹	NACA ¹	POE 2		
	Program Entrance (MTA Advisory Board)	0	0	•	•		
	Request For Proposals (RFP) Release			•	•		
	Pre-Contract Award		•	•	•		
DoDI 5000.80 Operation of the	Other Major Decision Point (e.g., MTA Advisory Boards)	0	0	•	•		
Middle Tier of Acquisition (MTA)	Annually and in Accordance with Local Policy			•	•		
Rapid Fielding (RF)	E STIMATE TYPE & APPROVAL AUTHORITY - ALL ACAT LEVE L THRE SHOLDS						
	CAPE LCCE: DCAPE (SAF/FMC ifdelegated)						
	SCP or NACA: SAF/FMC						
	POE: Center Cost Chiefor Delegated Authority						
	1. For MTA RF Programs likely to exceed ACAT I	O CAPE con					
	thresholds	of lifecycle costs; SCP may be conducted Lifecycle cost estimate required					
	2. For all MTA RF Programs	- Lilecycle	cost estimat	e required			

Table 2.4. Software Acquisition Pathway Program Estimate Requirements.

ACQUISITION PATHWAY	WHEN E STIMATE S ARE REQUIRED	CAPE Cost Estimate ¹	SCP ¹	NACA ¹	POE ²			
	Before the program enters the Planning Phase (PP)				•			
	Before the program enters the Execution Phase (EP)	0	•	•	•			
	Other Major Decis ion Point	0	0	•	•			
DoD15000.87 Operation of the	Annually and in Accordance with Local Policy			•	•			
Software (SW) Acquisition Pathway	ESTIMATE TYPE & APPROVAL AUTHORITY - ALL ACAT LEVEL THRESHOLDS							
Acquisition asimay	CAPE Cost Estimate: DCAPE (SAF/FMC if delegated)							
	SCP or NACA: SAF/FMC							
	POE: Center Cost Chief or Delegated Authority							
	1. For SW Pathway Programs likely to exceed ACAT I	O CAPE con	ducts or ap	pro ves an es	stimate			
	thresholds (over a 5-year period post EP entry)	of costs; SCP may be conducted						
	2. For all SW Pathway Programs	Estimate r	equired					

Table 2.5. Defense Business System Pathway Program Estimate Requirements.

ACQUISITION PATHWAY	WHEN ESTIMATES ARE REQUIRED	CAPE Cost Estimate ¹	SCP ¹	NACA ¹	POE ²		
	Solution Analysis Authority To Proceed (ATP)				•		
	Functional Requirements ATP				•		
	Acquisition ATP and/or Request For Proposals Release and/or Pre-Contract Award	0	0	•	•		
	Limited Deployment ATP	0	0	•	•		
	Full Deployment ATP	0	0	•	•		
DoD15000.75 Business Systems	Capability Support ATP	0	0	•	•		
Requirements and Acquisition	Other Major Decision Point	0		•	•		
	Annually and in Accordance with Local Policy			•	•		
	ESTIMATETYPE & APPROVAL AUTHORITY - ALL BCAT LEVEL THRESHOLDS						
	CAPE Cost Estimate: DCAPE (SAF/FMC if delegated)						
	SCP or NACA: SAF/FMC						
	POE: Center Cost Chief or D						
	For Defense Business System (DBS) Programs likely to exceed BCAT I thresholds	O CAPE may conduct a cost estimate; SCP may be conducted					
	2. For all DBS Pathway Programs	Estimate re		u			

Table 2.6. Defense Acquisition of Services Pathway Program Estimate Requirements.

ACQUISITION PATHWAY	WHEN ESTIMATES ARE REQUIRED	CAPE Cost Estimate ¹	SCP ¹	NACA ¹	POE ²		
	Services Requirements Review Board (SRRB) / Acq Strat Approval	0	0	•	•		
	Other Major Decision Point	0		•	•		
DoDI 5000.74	Annually and in Accordance with Local Policy			•	•		
Defense Acquisition	ESTIMATE TYPE & APPROVAL AUTHORITY - ALL SCAT LEVEL THRESHOLDS						
of Services	CAPE Cost Estimate: DCAPE (SAF/FMC if delegated)						
	SCP or NACA: SAF/FMC						
	POE: Center Cost Chief or Delegated Authority						
	1. For Acquistion of Services likely to exceed SCAT I thresholds	O CAPE may conduct a cost estimate; SCP may be conducted			ate;		
	2. For all Acquisition of Services	 Estimate re 	equired				

DEPARTMENT OF THE AIR FORCE SERVICE COST POSITION PROCESS

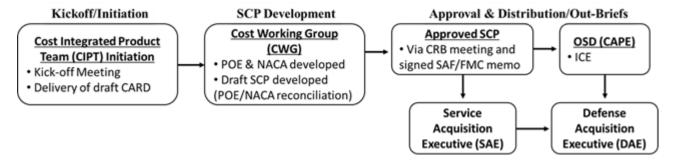
3.1. Purpose.

- 3.1.1. As noted in Chapter 2, the Service Cost Position (SCP) represents the DAF's official cost estimate and should cover the entire life cycle of an acquisition program. The SCP satisfies the requirement for a CCP per DoDI 5000.73. The purpose of the SCP CRB is to review and advise SAF/FMC on the SCP. SAF/FMC chairs the CRB, approves the SCP, and recommends a cost and schedule baseline via a signed memorandum to the SAE (i.e., SAF/AQ or SAF/SQ), SAF/FM, and the DAE when applicable. SCP CRB membership includes key stakeholders from various Secretariat and Headquarters Air Force and Space Force functional offices as noted in paragraph 3.2.5.1 of this instruction. The SCP process includes the development of both a POE and an AFCAA NACA (or AFCAA ICE if delegated by OSD CA).
- 3.1.2. **Table 2.1** through **Table 2.6** list the occurrences depending on the acquisition pathway when an SCP and/or ICE is required. The expectation is to follow the SCP and ICE development process as described in **paragraph 3.2** (**T-1**) Different acquisition pathways and different event-driven SCPs or ICEs, however, may require timeline or other tailoring as appropriate for estimate development as described in **paragraph 3.3**.
- 3.1.3. In instances when AFCAA develops an ICE but not an SCP, ICE development follows a process like the SCP process but tailored as appropriate and approved at the ICE kickoff meeting. An ICE CRB is held to review and advise SAF/FMC on the ICE. While PMO personnel do not participate directly in producing the ICE, collaborative interaction between the PMO and ICE teams is required to maximize the exchange of accurate information. (**T-0**)

3.2. SCP Process.

3.2.1. As depicted in **Figure 3.1** and **Figure 3.2**, the SCP process consists of three phases: 1) SCP/ICE kickoff; 2) SCP/ICE development; and 3) SCP/ICE approval and documentation/outbriefs.

Figure 3.1. DAF Service Cost Position: OSD Completes the ICE.



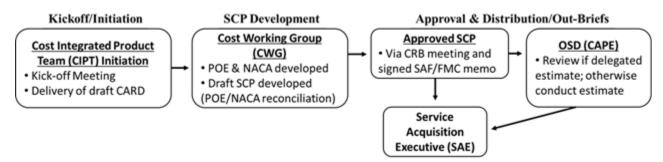


Figure 3.2. DAF Service Cost Position: OSD Delegates the ICE.

3.2.2. SCP/ICE Kickoff Phase:

- 3.2.2.1. This phase establishes the plan to produce a reliable SCP in support of the milestone or other acquisition decision. Decision forums include, but are not limited to, the CRB and the Component Acquisition Executive and other service/defense acquisition executive reviews as applicable.
- 3.2.2.2. SAF/FMC chairs the SCP kickoff meeting, although in some cases the cost Directorate Chief from OSD CA may co-chair. The entire Cost Integrated Product Team (CIPT), whose membership includes senior leaders from the organizations listed in **Table 3.1**, is invited to the SCP kickoff meeting. In some cases, representatives from AF/A8 or SF/S8 (and/or SF/S2 as applicable) and Deputy Assistant Secretary for Budget (SAF/FMB) representatives should also be invited to the kickoff. An AFCAA representative (typically the division chief or AFCAA Technical Director) serves as the CIPT lead. The Cost Working Group (CWG) is a subset of the CIPT and comprised of cost estimators from the organizations listed in **Table 3.1**.

Table 3.1. CWG / CIPT Membership List.

Cost Working Group (CWG)	Cost Integrated Product Team (CIPT)	
Membership	Memb er ship	
AFCAA (Lead)	AFCAA (Lead)	
Program Office Cost Staff	Program Office	
Center Cost Staff	Center Cost Staff	
OSD CA*	SAF/AQ or SAF/SQ (i.e., PEM)	
	PEO	
	OSD CA*	
Note: BCAT programs will also include SAF/FMCE and DoD CIO		
*Participates as applicable		

- 3.2.2.3. The SCP kickoff meeting should be held NLT 180 calendar days prior to the CRB. A guide to develop the SCP kickoff meeting agenda is in **Attachment 4**.
- 3.2.2.4. Prior to the kickoff, the AFCAA conducts discussions with the PMO as early as feasible, at least 30 60 calendar days prior to the due date of the draft CARD, to set up the kickoff meeting date, briefing content, and other preliminary planning. The CARD provides a description of the salient features of the acquisition program. **Chapter 4** provides a more in-depth description of the CARD. During these preliminary discussions,

the CWG members scope the effort required to support the SCP development and review process, develop a preliminary cost estimating schedule, and collect available program information (e.g., current CARD, preliminary POE, program schedule, identification of high cost and high-risk areas, technical and programmatic information, preliminary NACA, etc.). Support from the PMO and other technical subject matter experts is required to help identify high cost and high-risk areas, and key technical and schedule assumptions.

- 3.2.3. For all acquisition pathways, the CWG should follow the process and timeline outlined in either **Table 3.2**., **Table 3.3**, or **Table 3.4** as applicable and in adherence with Section 3.4 of DoDI 5000.73. Additional timeline requirements for rapid prototyping and rapid fielding programs per DoDI 5000.73 need to be tailored into the timelines. **Table 3.2** and **Table 3.3** depict the SCP timeline, depending on whether the OSD CA completes the ICE or delegates this to AFCAA. These tables must be used to develop the specific program's estimate schedule requirements, and associated planned dates must be presented at the SCP Kickoff meeting for approval. (**T-1**) The CWG should track planned vs actual times as the SCP development progresses.
 - 3.2.3.1. Tailoring of the timeline for specific unique program requirements, including unique requirements in DoDI 5000.73 for rapid prototyping and rapid fielding programs, must be approved at the kickoff. (**T-1**) If the program office and AFCAA respectively update the POE and NACA annually and the program baseline assumptions remain stable, these schedules *may* be condensed. This can be assessed at the kickoff meeting based on the briefings provided on the current POE and NACA basis of estimates and program status updates. Source selection or contract proposal/negotiation schedules should also be folded into the estimating schedule appropriately. Schedule requirements should be finalized during the kickoff, with any tailoring to DoDI 5000.73 timeline requirements approved by the OSD CA member.

Table 3.2. DAF SCP Timeline, OSD CA Developed ICE (Calendar Days).

Phase	Event	Days before CRB
Notification/Planning	Notify CAPE of Upcoming Milestone / Draft CARD Discussions	
Nonicadon Flaming	AFCAA Card Feedback / Kickoff Announcement	-195
	Draft CARD to CAPE and AFCAA / Kickoff / Estimating Plan to AFCAA/TD	-180
	CAPE and AFCAA CARD Sufficiency Review to PMO	-135
	AFCAA Midterm Review with AFCAA/TD	-120
	Midterm Reconciliation - PMO and AFCAA	-106
	Draft Final CARD to CAPE and AFCAA	-45
SCP Development	AFCAA Final Review with AFCAA/TD	-45
	Draft SCP to CAPE	-45
	Final Reconciliation - PMO and AFCAA	-37
	PMO Delivers Final CARD to CAPE and AFCAA	-21
	Reconciled SCP delivered to CAPE and AFCAA/TD	-12
	ICE / SCP Comparison Meeting	-7
	Pre-CRB Meeting	-3
	CRB Meeting / CAPE Brief Summary of Draft ICE	0
Briefing	Signed SCP Memo	7
Diems	Formal ICE / SCP Meeting	10
	CAPE Briefs ICE to MDA	19
	Defense Acquisition Board or AFRB/ARB (when SAE is MDA)	21
Finalization	CAPE Issues ICE report	28
тнышанон	SCP Documents to / in AFCAA Data Repository	30

Notes:

- 1. This time line may be tailored, depending upon the program and the information needed to best support the decision maker
- Dates shown in table are in alignment with DoDI 5000.73. If tailored or actual dates change, ensure new dates remain
 in alignment with requirements outlined in Figures 2, 3, 10 and 11 in DoDI 5000.73.

Table 3.3. DAF SCP Timeline, OSD CA Delegated ICE (Calendar Days).

Notification/Planning	Phase	Event	Days before CRB
AFCAA Card Feedback / Kickoff Announcement -19 Draft CARD to CAPE and AFCAA / Kickoff / Estimating Plan to AFCAA/TD -18 CARD Sufficiency Review to PMO -13 AFCAA Midterm Review with AFCAA/TD -12 Midterm Reconciliation - PMO and AFCAA -10 Draft Final CARD to CAPE and AFCAA -4 AFCAA Final Review with AFCAA/TD -4 Final Reconciliation - PMO and AFCAA -3 Draft AFCAA ICE and Draft SCP to CAPE -3 PMO Delivers Final CARD -2 Reconciled SCP delivered to CAPE and AFCAA/TD -1: Pre-CRB Meeting -2 CRB Meeting -3 Signed ICE memo and SCP memo to CAPE -3 AFRB/ARB (SAE review) / ICE Briefted -1 SCP Documents in AFCAA Data Repository -3 SCP Documents in AFCAA Data Reposit	Notification/Planning	Notify CAPE of Upcoming Milestone / Draft CARD Discussions	-210
CARD Sufficiency Review to PMO	Notification/Plaining	AFCAA Card Feedback / Kickoff Announcement	-195
AFCAA Midterm Review with AFCAA/TD		Draft CARD to CAPE and AFCAA / Kickoff / Estimating Plan to AFCAA/TD	-180
Midterm Reconciliation - PMO and AFCAA -10 Draft Final CARD to CAPE and AFCAA -4 AFCAA Final Review with AFCAA/TD -4 Final Reconciliation - PMO and AFCAA -3 Draft AFCAA ICE and Draft SCP to CAPE -3 PMO Delivers Final CARD -2 Reconciled SCP delivered to CAPE and AFCAA/TD -1: Pre-CRB Meeting -2 CRB Meeting -3 CRB Meeting		CARD Sufficiency Review to PMO	-135
SCP Development Draft Final CARD to CAPE and AFCAA AFCAA Final Review with AFCAA/TD Final Reconciliation - PMO and AFCAA Draft AFCAA ICE and Draft SCP to CAPE PMO Delivers Final CARD Reconciled SCP delivered to CAPE and AFCAA/TD Pre-CRB Meeting CRB Meeting CRB Meeting Signed ICE memo and SCP memo to CAPE CAPE memo AFRB/ARB (SAE review) / ICE Briefed SCP Documents in A EC AA Data Repository 33		AFCAA Midterm Review with AFCAA/TD	-120
AFCAA Final Review with AFCAA/ID Final Reconciliation - PMO and AFCAA Draft AFCAA ICE and Draft SCP to CAPE PMO Delivers Final CARD Reconciled SCP delivered to CAPE and AFCAA/ID Pre-CRB Meeting CRB Meeting Signed ICE memo and SCP memo to CAPE CAPE memo AFRB/ARB (SAE review) / ICE Briefed SCP Documents in AFCAA Data Repository 3		Midterm Reconciliation - PMO and AFCAA	-106
AFCAA Final Review with AFCAA/ID Final Reconciliation - PMO and AFCAA Draft AFCAA ICE and Draft SCP to CAPE PMO Delivers Final CARD Reconciled SCP delivered to CAPE and AFCAA/ID Pre-CRB Meeting CRB Meeting CRB Meeting Signed ICE memo and SCP memo to CAPE CAPE memo AFRB/ARB (SAE review) / ICE Briefed SCP Documents in AECAA Data Repository	SCD Davidonment	Draft Final CARD to CAPE and AFCAA	-45
Draft AFCAA ICE and Draft SCP to CAPE PMO Delivers Final CARD Reconciled SCP delivered to CAPE and AFCAA/TD Pre-CRB Meeting CRB Meeting Signed ICE memo and SCP memo to CAPE CAPE memo AFRB/ARB (SAE review) / ICE Briefed SCP Documents in AECAA Data Repository 30 -30 -30 -30 -30 -30 -30 -30	SCF Development	AFCAA Final Review with AFCAA/ID	-45
PMO Delivers Final CARD Reconciled SCP delivered to CAPE and AFCAA/TD Pre-CRB Meeting CRB Meeting Briefing Signed ICE memo and SCP memo to CAPE CAPE memo AFRB/ARB (SAE review) / ICE Briefed SCP Documents in AFCAA Data Repository 3		Final Reconciliation - PMO and AFCAA	-37
Reconciled SCP delivered to CAPE and AFCAA/TD Pre-CRB Meeting CRB Meeting Signed ICE memo and SCP memo to CAPE CAPE memo AFRB/ARB (SAE review) / ICE Briefed SCP Documents in AFCAA Data Repository 3		Draff AFCAA ICE and Draff SCP to CAPE	-30
Pre-CRB Meeting		PMO Delivers Final CARD	-21
CRB Meeting Signed ICE memo and SCP memo to CAPE CAPE memo AFRB/ARB (SAE review) / ICE Briefed SCP Documents in AFCA A Data Repository 3		Reconciled SCP delivered to CAPE and AFCAA/TD	-12
Briefing Signed ICE memo and SCP memo to CAPE CAPE memo 1 AFRB/ARB (SAE review) / ICE Briefed 1 SCP Documents in AFCA A Data Repository 3		Pre-CRB Meeting	-3
CAPE memo AFRB/ARB (SAE review) / ICE Briefed SCP Documents in AFCA A Data Repository 3		CRB Meeting	0
AFRB/ARB (SAE review) / ICE Briefed 1 SCP Documents in AFC A A Data Repository 3	Briefing	Signed ICE memo and SCP memo to CAPE	7
SCP Documents in A FC A A Data Repository		CAPE memo	14
SCP Documents in AFCAA Data Repository 3		AFRB/ARB (SAE review) / ICE Briefed	17
	Einstination	SCP Documents in AFCAA Data Repository	30
Update Cost Estimate Track Worksheet 3	ritaization	Update Cost Estimate Track Worksheet	30

Notes:

^{1.} This time line may be tailored, depending upon the program and the information needed to best support the decision maker.

Dates shown in table are in alignment with DoDI 5000.73. If tailored or actual dates change, ensure new dates remain
in alignment with requirements outlined in Figures 2, 3, 10 and 11 in DoDI 5000.73.

Phase	Event	Days before CRB
Notification/Planning	Draff Tailored CARD Discussions	-210
	AFCAA Tailored Card Feedback / Kickoff Announcement	-195
SCP Development	Tailored Draft CARD to AFCAA / SCP Kickoff / Estimating Plan to AFCAA/TD	-180
	Tailored CARD Sufficiency Review to PMO	-135
	AFCAA MidtermReview with AFCAA/TD	-120
	Midterm Reconciliation - PMO and AFCAA	-106
	Draft Final Tailored CARD	-45
	AFCAA Final Review with AFCAA/TD	-45
	Final Reconciliation - PMO and AFCAA	-37
	PMO delivers Final and Signed Tailored CARD	-21
	Reconciled SCP to AFCAA/TD	-12
Briefing	Pre-CRB Meeting	-3
	CRB Meeting	0
	Signed SCP Memo	7
	AFRB/ARB (SAE review)	17
Finalization	SCP Documents to / in AFCAA Data Repository	30
	Update Cost Estimate Track Worksheet	30

Table 3.4. DAF SCP Timeline, No OSD CA Involvement (Calendar Days).

Notes

- This timeline may be tailored, depending upon the program and the information needed to best support the decision maker.
- Dates shown in table are in alignment with DoDI 5000.73. If tailored or actual dates change, ensure new dates remain in alignment with requirements outlined in Figures 2, 3, 10 and 11 in DoDI 5000.73.
 - 3.2.3.2. The SCP is a result of a collaborative effort between the PMO and AFCAA. AFCAA develops a NACA/ICE while the PMO develops a POE. The PMO and AFCAA compare their estimates to understand differences between positions as well as identify the best methodologies to include in their recommendations for the SCP. This process provides the best possible SCP and ensures a non-biased, independent recommendation to SAF/FMC by the cost community.
 - 3.2.3.3. The SCP kickoff meeting should discuss plans and expectations for CWG collaboration. For cases where AFCAA is performing an ICE required by statute, no PMO personnel or Center Cost estimators may participate directly on the ICE team. (T-1) The ICE is a full LCCE, complies with all statutory requirements, and the schedule must reflect the requirement to provide the ICE to OSD CA for assessment. (T-0) For cases where an SCP is not required and only a delegated statutory ICE is developed by AFCAA, the ICE process will follow the similar but tailored SCP processes, holding a tailored kickoff to outline the specific process which will include a CRB. (T-1)

3.2.4. CWG SCP Development Phase.

3.2.4.1. The CWG SCP development phase begins no later than the SCP kickoff meeting, and it follows the process and timeline approved by SAF/FMC at the kickoff. Typically, the CWG has two main components: the PMO estimating team and AFCAA estimating

- team. When practical, the OSD CA analyst should be invited to participate in CWG meetings.
- 3.2.4.2. Regular meetings should be held to discuss outstanding CWG issues and concerns (e.g., estimating plan and schedule, cost and technical requirements, subject matter expert support, independent schedule assessments, CARD deficiencies, etc.). Early in the process, the PMO should provide the CARD or the full technical program description documents where a CARD is not required. In meetings with the CWG, a program/system description, requirements list, schedules, baseline program/technical characteristics, acquisition strategy, sustainment strategy, buy quantities, and a comparison between the current POE and approved program budget by appropriation are critical components to share to define the program and perform the estimates.
- 3.2.4.3. Elements of both the POE and AFCAA NACA/ICE should be shared with the CWG as they are finished. The CWG at a minimum should hold reconciliation meetings per the schedule outlined in the kickoff, but it is a best practice to hold regular estimating method reconciliation meetings to compare findings, data, and plans. The goal of the CWG is to work toward consensus on the best methods for the draft SCP and recommend those methods to the CIPT chair for approval. The premise behind reconciliations is a consensus-building exercise between professional counterparts. In instances where consensus is not reached, the CIPT chair ensures both methods are briefed and recommends a method to SAF/FMC prior to or at the CRB.
- 3.2.4.4. The POE and AFCAA NACA/ICE teams must ensure that technical, schedule, cost data, and cost models (where possible) are shared, issues are resolved in a timely manner, and differences between the estimates are fully understood by all parties. (**T-1**) As needed, additional CWG and CIPT meetings are held to collect information, identify and resolve issues, modify schedules, and make incremental decisions about the SCP. The CIPT leads prepare meeting agendas, minutes, and interfaces with other Air Force, Space Force, OSD, and services offices. As issues are raised, every effort should be made to resolve them at the CWG or CIPT level. Issues not resolved at the CWG or CIPT level are communicated by the CIPT lead to the CRB chair (SAF/FMC) for resolution. This can be done at any time during the SCP development phase.

3.2.5. SCP Briefing and Documentation Phase.

- 3.2.5.1. The DAF targets the CRB meeting to be held 17-21 calendar days prior to the acquisition decision meeting with signed SCP/ICE memorandums NLT 7 calendar days prior to the acquisition decision meeting (refer to **Table 3.2**., **Table 3.3**, and **Table 3.4**.). The CRB is a cross-functional review board, chaired by SAF/FMC, to review the SCP recommendation. The CRB membership includes: SAF/FMC (chair), SAF/FMCC, SAF/AQ or SAF/SQ three-letter (e.g., AQI, AQP, AQX, SQX, etc.), A8 or S8 (and/or S2 as applicable), Logistics, Engineering, & Force Protection (A4 or S4), SAF/FMB, PEO, PM, Center Cost Chief, and all CIPT members. SAF/AQ, SAF/SQ, and/or PEO/PMO team may invite representatives (i.e., requirements owning MAJCOM/FLDCOM) as needed to be members of the CRB.
- 3.2.5.2. Ideally, prior to the CRB and the signing of the SCP memorandum, multiple meetings at the CWG level have taken place where information on the draft final SCP and the OSD CA estimates have been fully shared. Presentation of the draft final POE, AFCAA

- NACA/ICE, OSD CA ICE (where applicable), and the SCP should occur according to the timelines outlined at the kickoff meeting (as guided by **Table 3.2**., **Table 3.3**, and **Table 3.4**.). OSD CA (as applicable) should attend the CRB to present all issues and concerns to ensure resolution or consideration prior to SAF/FMC signing of the SCP memorandum.
- 3.2.5.3. During the CRB meeting, the PM or their designee briefs a program overview. If a single estimate has been developed via consensus, the CIPT lead briefs this estimate as the draft SCP. When both a POE and a NACA have been accomplished and consensus is lacking for the draft SCP, the CIPT lead briefs the CRB on the draft SCP recommendation, but the POE and AFCAA NACA/ICE methods and estimates are briefed in detail to reconcile and decide on outstanding issues for SCP finalization. (T-1) The briefing should also include highlights of risks/opportunities identified by the reconciliation process and open discussion on any unresolved issues or special interest items.
- 3.2.5.4. Upon completion of the CRB meeting, and in accordance with the timelines in DoDI 5000.73 and provided in **Table 3.2**., **Table 3.3**, and **Table 3.4** of this instruction, SAF/FMC, the CRB chair, approves an SCP and provides a signed SCP memorandum to SAF/AQ or SAF/SQ, SAF/FM, and the Deputy Director for Cost Assessment (DDCA). If an ICE is delegated to AFCAA, SAF/FMC will provide a detailed ICE memorandum to DDCA which includes key assumptions, methods, phasing, and cost risks/uncertainty analysis. (**T-0**) If the SCP does not match the AFCAA ICE, or the ICE is not delegated to AFCAA, the AFCAA CIPT lead will provide a detailed SCP report including the key assumptions, methods, phasing, and cost risk/uncertainty analysis. (**T-1**)
- 3.2.5.5. AFCAA must support the PMO to ensure, per DoDI 5000.73, that funding certification be noted within the Acquisition Decision Memorandum (ADM) certifying the Future Years Defense Program (FYDP) fully funds the program consistent with the SAF/FMC signed recommended SCP or the SAF/FMC or DDCA ICE. (T-1) The ADM with funding certification statement must be submitted to OSD CA per the timeline required in DoDI 5000.73. (T-0)
- 3.2.5.6. After signing the SCP memorandum, AFCAA is responsible for presenting the SCP as requested to the DDCA, SAE, and/or DAE as applicable.
- 3.2.5.7. AFCAA will upload a copy of SCP and ICE memorandums into the Cost Assessment Data Enterprise (CADE). (**T-0**) AFCAA will also provide the necessary central repository cost estimate track record information spreadsheet/form into the AFCAA central repository. (**T-1**)
- 3.2.5.8. In the case of an MTA program, the CWG will provide a signed SCP memorandum documenting the estimated life cycle costs no later than 60 calendar days after the ADM documenting the DAF's decision to pursue a program using the rapid prototyping or fielding pathway is signed. (**T-0**)
- 3.2.5.9. AFCAA maintains a repository with templates for use in preparing CIPT kickoff meetings, CRB and OSD CA briefing charts, SCP memorandums, ICE memorandums, and SCP reports.
- **3.3. Tailoring the SCP Process.** SAF/FMC is the decision authority on procedures to be followed when generating a SCP outside of the formal SCP process described above. The SCP kickoff should propose any recommended tailoring for SAF/FMC approval. Examples of tailoring

may include limiting the CRB stakeholders to a smaller group (sometimes called a Cost Review Group vice a CRB to indicate the difference). Other examples are when only an ICE and not an SCP is prepared by AFCAA so the CIPT and CWG phases can be tailored, as appropriate. The multitude of acquisition pathway programs and associated event-driven SCPs may require timeline or other tailoring as appropriate and approved for SCP development.

COST ANALYSIS REQUIREMENTS DESCRIPTION (CARD)

4.1. Purpose. This chapter provides guidance on the CARD. A CARD is required for all MDAPs that are preparing for a Milestone decision, those identified in DoDI 5000.73, and any program subject to the SCP/ICE process described in this document. **(T-0)**

4.2. Background.

- 4.2.1. The CARD provides a description of the salient features of the acquisition program. It provides technical, schedule, and programmatic parameters facilitating a common, consistent, and accurate baseline for the program life cycle cost estimates. A well-constructed CARD reduces the likelihood of misunderstanding program content and significantly reduces the time needed to reconcile cost estimates.
- 4.2.2. DoDI 5000.73 and this chapter provide detailed information on when and how CARDs should be prepared, including a detailed outline of the information required in a CARD.

4.3. Guidance.

- 4.3.1. The CARD is a key component of the cost estimating process. It is the responsibility of the PM, and is typically developed by the program's engineering staff working in conjunction with the PM. The cost estimating team is highly dependent on this document as it is the primary source of program technical and schedule information used to understand program scope and technology requirements. It is the responsibility of the ICE, NACA, and POE cost estimating team leads to determine that the CARD is complete, accurate, and suitable for use as the technical and programmatic baseline for the cost estimate. The SCP/ICE timelines in **Chapter 3** will slip day for day until the CARD is considered sufficient by the cost estimating teams.
- 4.3.2. The CARD should be flexible and reference information available in other documents to the cost estimators. Proposal information is an essential component of the program definition for programs simultaneously engaged in a source selection and milestone review process; therefore, the CARD should be updated to include information that most accurately represents the program (such as ranges that reflect the entire spectrum of capable bidders, or the system description of the selected contractor), or the CIPT should be given direct access to the proposal information. The following paragraphs provide CARD guidance in addition to the DoDI 5000.73:
 - 4.3.2.1. The CARD should cover all efforts associated with the program, regardless of funding source or management control. It should address the responsibility of each funding source, including the responsibility of other DAF programs and components.
 - 4.3.2.2. The PMO will coordinate the final CARD with MAJCOM Operations, Plans, & Requirements (A3/5), A4, A8 (or Space Force equivalent when applicable), Product Center functional groups, relevant DAF functionals, and the CIPT before submitting to the PEO for approval. (**T-1**) The PMO is responsible for ensuring the CARD is updated to reflect all program changes, and the CIPT should be notified of all CARD updates.
 - 4.3.2.3. The OSD CAPE analyst approves and accepts CARDs (or program description document) for ACAT ID, MTA ACAT I equivalent RP Pathway Programs, ACAT I & II equivalent RF Pathway Programs, ACAT I & II equivalent Software Acquisition Pathway

programs, or other estimates at DCAPE discretion. The AFCAA lead cost analyst approves and accepts CARDs (or program description document) for ACAT IB/IC, DBS, and other relevant rapid acquisition programs where the service is the milestone or acquisition event decision authority.

- 4.3.2.4. CARD issues that cannot be resolved within the CIPT should be raised to the CRB for resolution.
- 4.3.2.5. Template workbooks will be used for commodities and tailored to collect significant portions of data on the general program and specific technical, operations and support, and disposal information. The templates, training, and guidance on CARD development are available electronically at https://cade.osd.mil/. (T-0)
- 4.3.2.6. All unclassified/controlled unclassified information (CUI) final CARDs must be uploaded to the CADE System. (T-0) The PMO will conduct a security review to ensure consolidation of data does not change classification level.

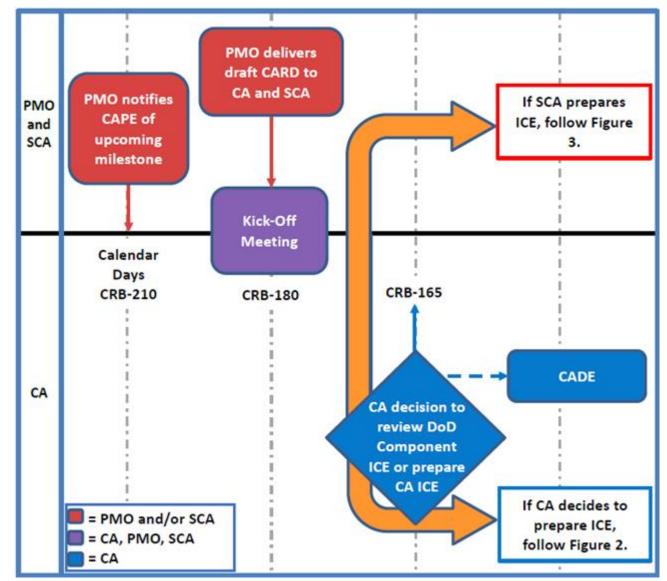


Figure 4.1. CARD Flowchart and Timeline.

Note: Figure 4.1 was taken from DoDI 5000.73 (Figure 1). Thus, Figure 3 and Figure 2 as referenced above can be found in DoDI 5000.73.

COST & SOFTWARE DATA REPORTING (CSDR) REQUIREMENTS

5.1. Purpose.

- 5.1.1. The DAF must comply with DoD cost data reporting as directed by statutory requirements in 10 USC § 3227 and regulatory requirements in DoDIs. (**T-0**) The data collected forms the basis of life cycle cost estimates required by statute as well as DoD and DAF policies to support programming and acquisition decisions, trade-off analysis, Analysis of Alternatives (AoAs), program reviews, source selection government estimates, negotiations, and other critical Department strategic decisions. The quality datasets resulting from proper implementation of these procedures will be available centrally to all service cost estimators and in-turn will enable PMO, Center Cost, and AFCAA cost estimators to produce more high-quality and timely cost analysis for decision authorities.
- 5.1.2. In accordance with 10 USC § 3227, DoDI 5000.73, and DoDM 5000.04, this chapter provides additional and clarifying DAF policy and procedures and assigns required cost reporting organizational responsibilities for each Service. This cost reporting is referred to collectively as CSDR. These CSDRs currently include the collection of cost and hour, quantity, software, technical, maintenance and repair parts, and business data reports.

5.2. CSDR Data Collection Process & Guidance.

- 5.2.1. Per DoDI 5000.73, systematic and institutionalized cost data collection by each DoD Component is important to support credible cost estimates of current and future programs. OSD CA provides the oversight and direction for policies, procedures, guides, tools, training, (on-site and virtual), and the database and IT infrastructure for data storage in the Cost Assessment Data Enterprise (CADE) system. Clarifications on the DoDI 5000.73 are provided below.
 - 5.2.1.1. Table 1 and Table 2 of the DoDI 5000.73 establish policy to institute the statutorily required cost reporting requirements for DoD programs and efforts anticipated to exceed \$100 million, then-year dollars, in acquisition expenditures.
 - 5.2.1.2. The policy within the table refers to reporting requirements delineated in reference to "ACAT I level" programs, "ACAT II level" programs, and other acquisition programs in an amount greater than \$100 million.
 - 5.2.1.2.1. An ACAT I level program is defined as any program type within the acquisition pathway definitions or other program definitions that exceed the threshold dollar value designated for MDAPs, also known as ACAT I programs, per 10 USC § 4201.
 - 5.2.1.2.2. An ACAT II level program is defined as any program type within the acquisition pathway definitions or other program definitions that exceed the threshold dollar value designated in 10 USC § 3041 for major systems (also known as ACAT II) programs.
 - 5.2.1.2.3. An ACAT III level program is defined as any program that does not meet the dollar value threshold for either an ACAT I level or ACAT II level program. In this instruction, ACAT III level programs describe the other acquisition programs in an

amount greater than \$100 million that are designated in DoDI 5000.73 and may require CSDRs.

- 5.2.1.3. The CSDR plan approval authority has the discretion to designate any acquisition program with acquisition expenditures expected to exceed \$100M as "high interest" and require CSDR reporting. Program investment categorizations (e.g., Acquisition Master List Exempt) are not criterion for determining CSDR reporting requirements. Therefore, all DAF programs, regardless of acquisition pathway or other designations that are valued above the \$100M statutory threshold for acquisition expenditures must contact their respective Center Cost Organization and AFCAA, as the designated approval authority per DoDI 5000.73 and DoDM 5000.04 for all non-ACAT I level programs, to determine cost data reporting requirements applicable to their program. (T-0) AFCAA, in consultation with the appropriate approval authorities identified in Figure 5.1, will evaluate and determine data reporting requirements. AFCAA will use DoDI 5000.73 guidance and may consult with OSD CA to determine cost data reporting requirements. Programs below ACAT II level dollar thresholds will be reviewed carefully for CSDR requirements by AFCAA, in consultation with Center Cost Chiefs and Cost Working Integrated Product Team (CWIPT) members. Examples of programs above \$100M but below ACAT II level dollar thresholds that would be of high interest for data reporting include but are not limited to:
 - 5.2.1.3.1. Trainer or Simulator development and production programs.
 - 5.2.1.3.2. Sustainment or life-extension programs.
 - 5.2.1.3.3. Software maintenance/enhancement/development or software Development, Security, and Operations (DEVSECOP) programs.
 - 5.2.1.3.4. Emerging technology projects/demonstrations/prototyping.
 - 5.2.1.3.5. New technology applications in avionics/electronics.
- 5.2.1.4. Table 2. of DoDI 5000.73 identifies contract, subcontract, and government effort thresholds for cost reporting regardless of acquisition phase and contract type (including non-Federal Acquisition Regulation (FAR) agreements). "Other Transactional Authorities (OTAs)" are an example of non-FAR agreements.
- 5.2.1.5. Table 2. of DoDI 5000.73 states Software Resource Data Reports (SRDRs) are required where the software effort exceeds \$20 million, then-year dollars, and a) the program exceeds the ACAT I-II level thresholds or b) the Information System or MTA program is anticipated to exceed \$100 million, then-year dollars, in acquisition expenditures. This valuation of the software effort must consider several factors:
 - 5.2.1.5.1. Program value calculation and the requirement to provide the SRDR is applicable to the combined value of the system integrator (which may be a government organization, contractor, public-private partnership, awardee, or consortium) and each contract, agreement, or government performed effort that contributes software to a weapon system. The requirement to report SRDR is applicable if the total then-year dollars for the sum of all contracts, agreements, and government performed efforts that contribute software to a weapon system exceeds \$100 million in acquisition expenditures and \$20 million in software costs. When the \$100 million in acquisition

- expenditures and \$20 million in software cost thresholds are exceeded, the SRDR deliverable requirement, or other artifact agreed to by the CWIPT, will be included in all contracts, agreements, and government performed efforts that contribute software to the weapon system. (T-0)
- 5.2.1.5.2. To determine software effort value, the core software development tasks (e.g., requirements analysis, design, coding, test) as well as the associated Systems Engineering, Integration and Test, and Program Management (SEITPM) tasks that directly support the core software development must be considered. (T-0) This includes software-specific support such as software program management, software systems engineering, and software quality assurance.
- 5.2.1.5.3. The government estimate of expected costs is used to determine the value of acquisition expenditures and software effort for the purposes of reporting requirements. The CWIPT should review these costs carefully to determine whether the CSDR requirement applies, and the data would be of value to the cost community.
- 5.2.1.6. As outlined in DoDI 5000.73, the CSDR approval authority must determine if cost reporting may be required when explicit contract or dollar thresholds are not met. (**T-0**) In those cases, the program may have high interest or high-risk contracts, subcontracts, or government efforts which would require CSDRs (or tailored cost reporting). The following list is not all inclusive but provides examples of efforts that would fit this criteria:
 - 5.2.1.6.1. New technology applications in avionics/electronics.
 - 5.2.1.6.2. DEVSECOP or other software development programs.
 - 5.2.1.6.3. Emerging technology research.
 - 5.2.1.6.4. Government test efforts.
 - 5.2.1.6.5. Software maintenance efforts (government or contractor).
 - 5.2.1.6.6. Contractor Logistics Support contracts on weapon or information system programs.
- 5.2.2. CSDR Approval Authorities.
 - 5.2.2.1. Per DoDI 5000.73, the DDCA has the approval authority and responsibility for CSDR planning, validation, and compliance processes for all ACAT I level programs. In addition, OSD CA is the waiver authority for all programs that meet the requirements for reporting regardless of program dollar thresholds.
 - 5.2.2.2. Per DoDI 5000.73, SAF/FMC has the approval authority and responsibility for CSDR planning, validation, and compliance processes for \$100M programs that are not designated ACAT I level programs. As such, SAF/FMC designates AFCAA with the approval authority for all ACAT II level programs, and the Center Cost Chiefs with the approval authority and responsibility for CSDR planning, validation, and compliance processes for their respective ACAT III level programs.
 - 5.2.2.3. **Figure 5.1** provides a summary of the approval authority delegations for DAF PEO programs.

Approval Authority	Program Executive Office (PEO)
OSD CAPE	ACAT I Level Programs – ALL PEOs
AFCAA Technical Director	All ACAT II Level Programs (Acquisition Pathway and Other) – ALL PEOs ACAT III Level Programs for the following PEOs: Rapid Capabilities Office Space Capabilities Office Combat & Mission Support All other ACAT III level programs outside the AFLCMC, SSC, AFNWC PEOs
Cost Chief for Air Force Life Cycle Management, Cost and Economics Division (AFLCMC/FZC) or request AFCAA delegation to AFLCMC/FZC operating location cost chiefs or Cost Chief for Air Force Sustainment Center, Cost and Economics Division (AFSC/FZC)	ACAT III Level Programs for all AFLCMC PEOs
Space Systems Command (SSC) Cost Chief	ACAT III Level Programs for all SSC PEOs
Air Force Nuclear Weapons Center (AFNWC) Cost Chief	ACAT III Level for all AFNWC PEOs

Figure 5.1. CSDR Plan Approval Authorities for all DAF Programs.

5.3. Air Force and Space Force Organizational Responsibilities.

5.3.1. DoDM 5000.04 provides CSDR planning, validation, and compliance process responsibilities for the PMOs and the SCAs. AFCAA is the SCA for the Air and Space Forces. In addition to DoDM 5000.04 direction, the following provides clarifying direction for Air Force and Space Force organizations on all programs.

5.3.1.1. AFCAA:

- 5.3.1.1.1 Must, as the designated representative on the Cost Reporting Standards Board (CRSB) outlined in DoDM 5000.04, work with the Center Cost Staffs and the PMOs to identify issues to bring before the CRSB and coordinate any CRSB recommendations with the Center Cost Staffs and PMOs as appropriate. (**T-0**)
- 5.3.1.1.2. Provide an overarching AFCAA CSDR process manager to oversee and direct the contract support staff in the OSD Defense Cost And Resource Center (DCARC) office for DAF ACAT I level programs, and the Department of the Air Force Cost and Resource Center (DAFCARC) team for DAF ACAT II-III level programs.
- 5.3.1.1.3. Review and provide recommendations on all waivers submitted to DDCA.

5.3.1.2. Center Cost Staff:

- 5.3.1.2.1. May participate as members of CWIPTs on ACAT I level and ACAT II level programs.
- 5.3.1.2.2. Must participate as members of CWIPTs on ACAT III level programs, and provide the CWIPT's final recommended CSDR plan package for Center Cost Chief approval. (T-1)
- 5.3.1.2.3. As CWIPT members, Center Cost Staffs assist in all aspects of planning, validation, and compliance to include ensuring timely identification of upcoming

solicitations and request for proposal (RFP) releases, approved data plans represent the broader cost community data needs for future cost estimating, and valid data is submitted as required by the final approved plans.

5.3.1.3. PMO:

- 5.3.1.3.1. Must contact AFCAA (and Center Cost Staff) annually, at minimum, and as necessary to identify upcoming RFP and solicitations to determine cost data reporting requirements and allow time to develop and approve a CSDR plan for inclusion in the final RFP/solicitation. A best practice is to develop draft CSDR plans in time to support draft RFPs/solicitations, requests for information (RFIs), and industry day discussions via early CWIPT engagement. This results in more efficient and effective CSDR planning, improved reporting entity's submissions, and allows for two-way discussions which will provide clarifications on government requirements and solicit reporting entity's feedback on draft CSDR plan proposals.
- 5.3.1.3.2. Must ensure the final CSDR plan, as approved by the appropriate CSDR approval authority, is included in the RFP and awarded on the contract. No revisions can be made to the approved CSDR, even during negotiations or by contracting officers pre/post award, without discussion and approval by the DDCA (or delegated AFCAA/Center Cost Chief approval authority).
- 5.3.1.3.3. Must initiate and schedule CSDR Readiness Reviews (CSDR-RRs) with the reporting entity, post award, to allow timely and effective requirements clarification and gain DDCA (or delegated AFCAA/Center Cost Chief approval authority) approval of resulting reporting entity or government proposed CSDR plan revisions as needed.
- 5.3.1.3.4. Must submit all waiver requests concurrently to Center Cost Chiefs and AFCAA prior to submission to OSD CA.

5.4. DAF ACAT I Level Program CSDR Process.

- 5.4.1. Planning Process. Follow CSDR planning procedures outlined in DoDM 5000.04 for ACAT I level programs and in addition:
 - 5.4.1.1. The DCARC ensures that a CWIPT kickoff meeting is held and ensure CWIPT members (refer to **Table 5.1.**) from DCARC, AFCAA, the relevant Center Cost Organization, and PMO attend. DCARC, in consultation with the PMO, will invite reporting entity's representatives to join the CWIPT when appropriate (e.g., sole source contract). The DCARC provides general guidelines and specific CSDR training tailored to the level of the capabilities and familiarity of the PMO team.

Table 5.1. CWIPT Membership.

Cost Working Integrated Product Team (CWIPT) Membership			
Consists of analysts from the following:			
OSD CA	DCARC (ACAT I Programs)		
PMO	DAFCARC (non-ACAT I)		
AFCAA (or SCA equivalent)	EVM		
Reporting Entity			

- 5.4.1.2. Prior to or at the kickoff, the DCARC will ensure all analysts have CADE accounts which are necessary to participate in the CSDR planning process.
- 5.4.1.3. The DCARC will develop an initial draft plan based on the most applicable CSDR standard plan template and proposed tailoring based on any early knowledge of unique aspects of the program. This initial draft plan will be provided to the CWIPT as a starting point for discussion.
- 5.4.1.4. AFCAA Division Technical Advisors (TAs) are the final authoritative voting member within the CADE. Prior to submitting a final vote, TAs must obtain the AFCAA Technical Director's approval of the plan and the Contract Data Requirement Lists (CDRLs) / Agreement Data Requirement List (ADRLs) form language. (T-1)
- 5.4.1.5. The DCARC tracks the compliance of the CSDR planning process to ensure the PMO has placed the final approved CSDR plan and CDRL/ADRL documents on contract.
- 5.4.1.6. All CWIPT members are invited to participate in the CSDR-RR, which are held with the reporting entities to clarify requirements and revise CSDR plan as needed.
- 5.4.1.7. **Figure 5.2** outlines a typical timeframe for each of the CSDR planning activities required by DoDI 5000.73, DoDM 5000.04, and this instruction. It is important to note the **Figure 5.2** timeframe targets the final RFP, but the recommended best practice would adjust that timeline to provide a draft plan for industry day, RFIs, and draft RFPs. This best practice has been proven to 1) give the private sector an opportunity to provide early input to the final CSDR plan and 2) assist the private sector, including non-traditional vendors and small businesses, with understanding the requirement to alleviate common misconceptions (e.g., CSDR is not the same as Integrated Program Management Data and Analysis Report or Earned Value Management). Overall, this reduces time needed during negotiation or source selection to understand the cost data reporting requirement and results in fewer revisions/issues identified during the CSDR-RR.

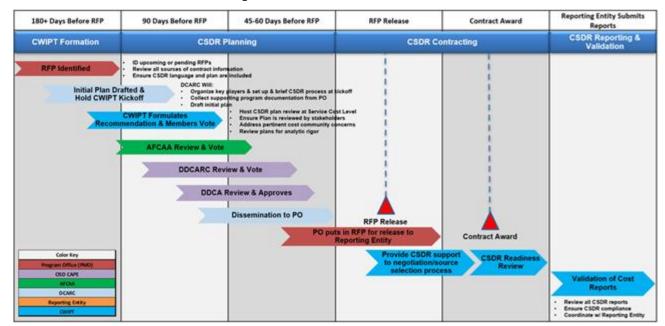


Figure 5.2. DAF ACAT I Level Program CSDR Planning & Submission Validation Process and General Timeline Requirements.

- 5.4.2. Verification and Validation and Submission Acceptance. Follow the ACAT I level program validation procedures in DoDM 5000.04. Below provides the general validation and verification procedures for DCARC led reviews of ACAT I level program submissions. The process is the same for ACAT II/III level program submissions but replaces the DCARC role with the DAFCARC since CAPE is not involved for those programs.
 - 5.4.2.1. Upon submission receipt, the DCARC reviews the data to ensure that it is complete, accurate, and aligns with the CSDR plan placed on contract and the applicable Data Item Descriptions (DIDs).
 - 5.4.2.2. PMO, AFCAA, CAPE and if desired, the Center Cost Staff, review the submissions based on their knowledge of the program and effort on contract. Then the reviewing organizations provide feedback to the DCARC.
 - 5.4.2.3. The DCARC creates one master "Validation Error Report" containing all issues found by the CAPE, AFCAA, DCARC, PMO, and Center Cost Staff and provides it to the reporting entity.
 - 5.4.2.4. Reporting entity/Submitter must make updates and resubmit the reports within the specified timeframe (i.e., one week). New submissions will iterate through steps outlined in **paragraph 5.4.2.1.** through **paragraph 5.4.2.3.** until the report does not contain errors.
 - 5.4.2.5. Upon submission of an error-free report, the DCARC accepts it within the CADE system, and the report becomes accessible by CADE Data & Analytic module users.
- 5.4.3. Compliance. Follow CSDR ACAT I level submission compliance assessment and issue resolution procedures outlined in DoDM 5000.04. General procedures are as follows:
 - 5.4.3.1. For DAF ACAT I level programs, the DCARC performs quarterly CSDR submission compliance assessments for each program. Assessment results are reported in

- the Defense Acquisition Executive Summary (DAES), major milestone or program event acquisition reviews, or similar program summaries/reviews provided to Office of the Under Secretary of Defense for Acquisition & Sustainment (OUSD A&S) and the service acquisition decision authorities.
- 5.4.3.2. Compliance assessments are rated either Green, Green Advisory, Yellow, Red, Red Critical, or Not Rated based on adherence to CSDR policy.
- 5.4.3.3. The DCARC sends each program's quarterly compliance summary reports, at a minimum, to PMOs, AFCAA, Air Force and Space Force Center Cost Chiefs, PEOs, SAF/AQX or SAF/SQX, and the DDCA. When compliance ratings are Red or Red Critical, the DCARC will send the compliance summary report monthly and set up recurring CWIPT meetings for a get-well plan until CSDR compliance issues are resolved.
- 5.4.3.4. The DCARC may work with the PMO, AFCAA, and/or the Center staffs to resolve compliance issues. In the case of DAES reviews, compliance assessments begin on the 1st business day of the month prior to the DAES review to allow time to evaluate each program and consult with the PMO, OSD CA analyst, AFCAA, Center Cost Staff, and reporting entity before issuing the final assessment. On the 8th business day of the month, OSD CA submits the final compliance assessments for the DAES.
- 5.4.3.5. The DCARC may elevate delinquent reports to the CAPE Director and AFCAA Executive Director for further action with the PEO and the respective Service Acquisition Executive.

5.5. Air Force and Space Force ACAT II/III Level Program CSDR Process.

5.5.1. Roles and Responsibilities. DoDM 5000.04 provides responsibilities for the PMOs and SCAs (AFCAA) in the CSDR planning, validation, and compliance processes. **Paragraph 5.2.2.** of this instruction summarizes approval authority roles and responsibilities for CSDRs. The following provides additional specific organizational responsibilities for Air Force and Space Force ACAT II/III level programs.

5.5.1.1. AFCAA Technical Director:

- 5.5.1.1.1. Approves all ACAT II level program CSDR plans via a signed memorandum and oversees delegated Center Cost Chiefs approval process for ACAT III level programs.
- 5.5.1.1.2. Provides resource management and oversees duties of AFCAA CSDR Process Manager and DAFCARC.

5.5.1.2. AFCAA CSDR Process Manager and the DAFCARC support team:

- 5.5.1.2.1. Provides overarching ACAT II/III level program CSDR process management support, training, policy interpretation, guidance to Air Force and Space Force programs. Develops and provides best practice guides, and conducts/leads CSDR continuous process improvement efforts.
- 5.5.1.2.2. DAFCARC direct support efforts include, but are not limited to: working with PMOs/ to identify and track upcoming industry days, RFIs, RFPs, and solicitations to ensure timely CWIPT kickoffs; presenting kickoff CWIPT briefings and providing specific training to the PMO and/or Industry participants; developing the initial draft

CSDR plan as a starting point for CWIPT consideration; providing specialized CSDR subject matter expertise to support and lead CWIPT efforts; and ensuring all regulations and standard procedures are followed.

5.5.1.3. AFCAA Division TA:

- 5.5.1.3.1. Ensures division analysts participate as an active member in all ACAT II level CWIPTs, reviews/guides member inputs, and provides a final recommended plan for ACAT II level programs to the AFCAA Technical Director for approval.
- 5.5.1.3.2. May participate or ensure participation of division staff as members or advisors to ACAT III level program CWIPTs. AFCAA is not required to participate but may participate as desired for high interest items.

5.5.1.4. Center Cost Chief:

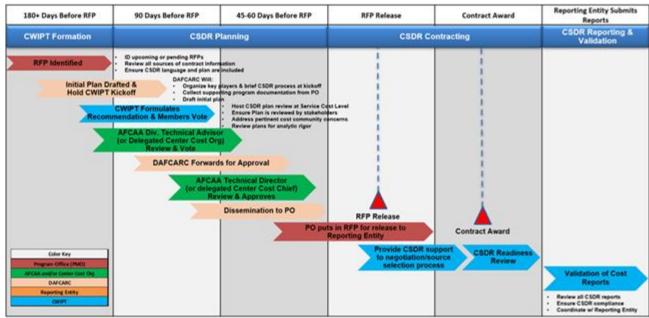
- 5.5.1.4.1. As delegated, signs approval memorandum for ACAT III level program CSDR plans.
- 5.5.1.4.2. Ensures AFCAA is invited to participate as a member/advisor of the CWIPT on ACAT III level programs.
- 5.5.1.4.3. Provides an annual briefing/report of approved plans, validation issues, and compliance issues for their delegated programs to AFCAA CSDR Process Manager and AFCAA Technical Director. AFCAA will use the briefing/reports to oversee the delegation authorities and provide inputs on best practices and lessons learned each year.
- 5.5.1.5. Center Cost Staff: Please refer to **paragraph 5.3.1.2.** for requirement distinctions between ACAT I/II/III.

5.5.1.6. PMO:

- 5.5.1.6.1. Same requirements for all level of programs requiring CSDRs. Please refer to **paragraph 5.3.1.3**.
- 5.5.1.6.2. Ensures AFCAA is invited to participate as a member/advisor of the CWIPT on ACAT III level programs.
- 5.5.2. Planning. Follow CSDR planning procedures outlined in DoDM 5000.04 for ACAT II/III level programs and in addition:
 - 5.5.2.1. DAFCARC will ensure that a CWIPT kickoff meeting is held and ensure CWIPT members from DAFCARC, PMO, AFCAA, Center Cost Organization, and other relevant representatives attend. DAFCARC, in consultation with the PMO, will invite reporting entity's representatives to join the CWIPT where appropriate (e.g., sole source contract). DAFCARC provides a brief on general guidelines and provide specific CSDR training tailored to the level of the PMO team member capabilities and familiarity with the CSDR process. Prior to or at the kickoff, DAFCARC will ensure all analysts have CADE accounts necessary to participate fully in the process via CADE planning tools (e.g., CADE's Program Planning Module (PPM) used to vote on proposed plans).
 - 5.5.2.2. DAFCARC provides an initial draft plan as a CWIPT starting point for discussions. The initial draft plan will be based on the most appropriate CSDR standard

- plan template but with proposed editing/tailoring based on any early program information (e.g., draft PWS/SOW, acquisition strategy documents, CARDs).
- 5.5.2.3. ACAT II Level Program Approval Process. AFCAA Division TAs are the final authoritative AFCAA voting member prior to obtaining the AFCAA Technical Director's approval of the plan and the CDRL/ADRL form language. DAFCARC will provide a consolidated coordination summary package with relevant information on voting of CWIPT member inputs, and other required information summaries to the AFCAA Technical Director to support the approval process. AFCAA Technical Director will sign a memorandum approving the CSDR plan and CDRL/ADRL form language prior to final RFP releases.
- 5.5.2.4. ACAT III Level Program Approval Process. Procedures for approval process for Centers will be directed by the delegated Center Cost Chief approval authority. AFCAA must be invited to participate on the CWIPT as an advisor, however, AFCAA participation is dependent on analyst availability. DAFCARC will support the Center Cost Chief as directed to include providing a package with relevant information on voting of CWIPT members, and other required information summaries for the Center Cost Chief to make an informed final approval decision. Center Cost Chief will sign a memorandum approving the CSDR plan and CDRL/ADRL form language prior to final RFP releases.
- 5.5.2.5. DAFCARC will track plan process compliance to ensure the PMO has placed the final CSDR plan and CDRL/ADRL documents on contract.
- 5.5.2.6. All CWIPT members should be invited to participate in the CSDR-RR which are held with reporting entity(ies) to clarify requirements and revise the CSDR plan as needed.
- 5.5.2.7. **Figure 5.3** provides a summary snapshot of the Air Force and Space Force ACAT II/III level program planning and submission process.

Figure 5.3. DAF ACAT II/III Level Program CSDR Planning and Submission Validation Process and General Timeline Requirements.



- 5.5.3. Verification and Validation. Follow CSDR verification and validation procedures for ACAT II/III level programs as outlined in DoDM 5000.04. Per **paragraph 5.5.2.** of this instruction, ACAT II/III level programs follow the same process as ACAT I level programs for Validation and Verification, but functions performed by DCARC are instead provided by the DAFCARC.
- 5.5.4. Compliance. Follow CSDR ACAT II/III level submission compliance assessment and issue resolution procedures outlined in DoDM 5000.04 and this instruction.
 - 5.5.4.1. DAFCARC tracks deliverables and contacts the reporting entity who are delinquent in submissions, or have significant validation compliance issues, and performs monthly CSDR submission compliance assessments for ACAT II/III level programs.
 - 5.5.4.2. Compliance assessments are rated either Green, Green Advisory, Yellow, Red, Red Critical, or Not Rated based on adherence to CSDR policy and criteria.
 - 5.5.4.3. Initial draft assessments each month are sent to the PMOs for review and comment before becoming final. DAFCARC updates assessments based on communication with PMOs and publishes the final monthly assessment in the CADE system.
 - 5.5.4.4. DAFCARC creates a summary report focused specifically on all Red ACAT II/III level programs and sends (at least) quarterly to the PMOs, respective Center Cost Organization, AFCAA Division TAs, AFCAA Technical Director, and the SAF/AQX or SAF/SQX designated representative.
 - 5.5.4.5. DAFCARC works with the PMOs, soliciting AFCAA and Center Cost Staff support as necessary, to resolve compliance issues. If there is no resolution within a reasonable period of engagement, DAFCARC will elevate the delinquent reports to the AFCAA Executive Director for further action with the PEO and the respective Service Acquisition Executive.

5.6. Government Performed Efforts and Other Special Data Reporting.

- 5.6.1. Memorandum of agreements (MOAs) must be used in situations when non-standard contract vehicles/agreements are used, government entities perform the work/effort for which the data are collected, or an alternative party (e.g., PMO) submits the data rather than the performing agency (e.g., the contractor or government test entity). (T-1)
- 5.6.2. MOAs establish a framework governing the respective organizational relationships, responsibilities, and activities between AFCAA, the Center Cost Staff, the PMOs, and/or the other government reporting entity to obtain the data required for the cost community and to comply with statute and DoD policy.
- 5.6.3. Similar to a CSDR plan that goes on contract, these agreements will specify the format for the data to be provided, the frequency, and any other instructions or organizational responsibilities for data collection and reporting. The data agreement will require the information/data formats to be uploaded into the CADE repository. Though MOAs can take many forms, there are four different example types of MOA templates that are available on the CADE website as follows:
 - 5.6.3.1. Technical Data MOA Alternative formats for delivery of technical data in lieu of the Technical Data Report (TDR) being placed on contract.

- 5.6.3.2. Organic Reporting Format used for delivery of cost and technical data from a government organization.
- 5.6.3.3. CARD-like MOA All programs required to provide CSDRs are not necessarily required to provide a CARD (e.g., ACAT II/III level programs). However, the CARD is a key document used to understand the program for which the cost data was collected and to properly apply the data in future cost estimates. This MOA format ensures proper programmatic and CARD-like program descriptions are collected and available within the CADE system to supplement the cost, software, and technical data collected via CSDRs for the program. Typically, the MOA should not require the program to create a new document, but it should encourage the upload of existing program documentation that provides sufficient program descriptions and programmatic insights for cost estimators who will use the program's cost data in the development of future estimates.
- 5.6.3.4. Test & Evaluation (T&E) MOA for organic site reporting There has been significant statutory language requiring improved data reporting on T&E costs for programs. This MOA was designed to collect the data to comply with Congressional direction and issues with lack of insight into T&E costs. The MOA typically is designed as follows:
 - 5.6.3.4.1. Financial Reporting Annual submission of costs, hours, and funding. It is important to note that similar requirements are currently reported via Category Project Management Reports (PMRs) provided by the 412th Test Wing to its customers.
 - 5.6.3.4.2. Technical Reporting Annual submission of technical data, which typically includes, but may not be limited to, the following elements: Flight test hours and sorties, Ground test hours, Test points, Software drops, Deficiency Reports, and Significant test related schedule events.

Chapter 6

DOCUMENTATION

- **6.1. Purpose.** This chapter provides guidance on the minimum documentation required for all Department of the Air Force cost estimates. More detailed cost estimate documentation is highly encouraged.
- **6.2. Background.** Documentation requirements apply to all programs subject to the SCP/ICE process (e.g., ACAT I equivalent MTA programs, ACAT IB/IC programs). Documentation for any other program cost estimate will be submitted to the milestone/other decision authority and their cost analysis support organizations. Documentation should be sufficiently complete and well organized to enable a qualified cost professional to reconstruct the cost estimate given access to only the documentation. For programs subject to the SCP/ICE process, interim documentation requirements should be established by the CIPT during the CIPT kickoff meeting.

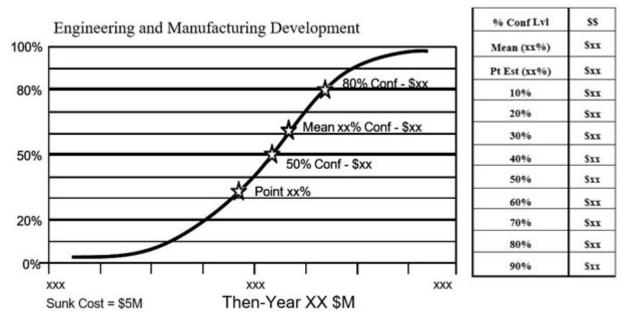
6.3. Guidance.

- 6.3.1. Cost estimate documentation provides a detailed record of the estimating methods, data, environment, and events supporting the development or update of a cost estimate. It should be replicable and must be submitted electronically. (**T-0**)
- 6.3.2. Quality documentation makes an estimate more credible, aids in the analysis of changes in program cost, enables a reviewer to fully understand and replicate the cost estimate, contributes to the population of databases used to estimate the cost of future programs, and facilitates continuous process improvement across the cost estimating community. Cost estimate documentation should:
 - 6.3.2.1. Contain an outline. A checklist with minimum documentation requirements is provided in **Attachment 3**.
 - 6.3.2.2. Include a summary of the cost estimate by program phase, by appropriation and by fiscal year. This summary should display both then-year and constant-year dollars and delineate cost estimate confidence level(s).
 - 6.3.2.3. Describe cost estimate Ground Rules and Assumptions (GR&As) such as cost, schedule and technical. GR&As are unique to the program but should cover all influential areas. They include cost estimate limitations and caveats, methods and constraints applied to "time phase" the estimate, estimate base year, inflation and escalation indices used, profit/fee assumptions, development and procurement quantities, participating agency support, government and contractor furnished equipment, and contractor rates and relationships.
 - 6.3.2.4. Display a breakout of total cost by program phase and major cost element, paired with a brief summary of the cost estimating methods used to estimate the cost of all major cost drivers. Smaller dollar value cost elements may be rolled into an "other" line.
 - 6.3.2.5. Provide summary descriptions of the process used to address cost, technical, and schedule risks and opportunities.
 - 6.3.2.6. Provide a detailed estimating methods description section that should include a detailed description of the WBS element content as well as the method and data applied to

estimate the cost of every significant WBS element. Published Cost Estimating Relationships, data, statistics, etc. should also be documented.

- 6.3.2.6.1. Estimated total and time phased costs, in constant-year and then-year dollars, for each element and each roll-up element should be included.
- 6.3.2.6.2. A detailed discussion on the method used to consider cost, technical, and schedule risk and opportunities, including a discussion on the rationale for risk bounds and distributions (normal, triangular, etc.) selected should be included.
- 6.3.2.6.3. PMO will conduct a security review to ensure consolidation of data does not change classification level.
- 6.3.2.7. Where produced, include a separate Cumulative Distribution Function (CDF) or "S-Curve" for each phase, specifically for the Engineering and Manufacturing Development and Production and Deployment phases. Where practical, development and production and deployment CDFs can be provided by funding source. The point estimate, fifty percent confidence level, eighty percent confidence level, and mean points should be identified. CDFs should display then-year dollars and include only "cost to go." Sunk costs should be excluded and noted at the bottom of the page. Along with the CDF, a table showing the cost estimate in 10% confidence level increments should be included. **Table 6.1.** provides a notional example.

Table 6.1. Cumulative Distribution Function.



6.3.2.8. Using a table, display cost by appropriation in then-year dollars. Where available, compare estimated cost to program budget (either the President's Budget or the POM), highlighting constraints, shortfalls, and excesses. This comparison should include all sunk or prior year costs, FYDP costs, and to complete costs. Prior year costs should equal program funds previously committed, obligated, and/or executed, and should therefore not reveal any shortfalls or excesses.

6.3.2.9. Chronology of program cost estimates. Display the history of prior cost estimates at each milestone decision and major program decision point, by program phase and by appropriation. (Note that program phases may contain more than one appropriation.) Discuss the evolution of the cost estimates with particular emphasis on significant changes in estimated program cost, scope, or schedule. Also, discuss any significant changes in program cost drivers or cost, technical, and schedule risk assessments. Initially display changes in then-year dollars then convert to constant-year dollars to present inflation adjusted comparisons. In each estimate, provide a breakout of the cost estimates for each major contract and do a chronology of estimates versus contract actuals. Provide an assessment of the program technical and schedule baseline highlighting any deviations from the established baseline (CARD or other reference materials).

6.3.2.10. Identify the cost estimating team composition including all noteworthy contributors.

CARLOS RODGERS

(Acting) Assistant Secretary of the Air Force (Financial Management and Comptroller)

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

10 USC § 3041, Major system

10 USC § 3221, Director of Cost Assessment and Program Evaluation

10 USC § 3222, Independent cost estimate required before approval

10 USC § 3227, Guidelines and collection method for acquisition of cost data

10 USC § 4201, MDAP: definition; exceptions

10 USC § 4251, MDAP: determination required before Milestone A approval

10 USC § 4252, MDAP: certification required before Milestone B approval

10 USC § 4253, MDAP: submissions to Congress on Milestone C

10 USC § 4328, Weapon system design: sustainment factors

10 USC § 4376, Breach of critical cost growth threshold: reassessment of program; presumption of program termination

10 USC § 4377, Breach of critical cost growth threshold: actions if program not terminated

10 USC § 4323, Sustainment Reviews

Public Law 111-23, Weapon Systems Acquisition Reform Act (WSARA) 22 May 2009

DoDD 5000.01, The Defense Acquisition System, 9 September 2020

DoDI 5000.02, Operation of the Adaptive Acquisition Framework, 23 January 2020

DoDI 5000.73, Cost Analysis Guidance and Procedures, 24 October 2024

DoDI 5000.74, Defense Acquisition of Services, 10 January 2020

DoDI 5000.75, Business System Requirements and Acquisition, 2 February 2017

DoDI 5000.80, Operation of the Middle Tier of Acquisition (MTA), 30 December 2019

DoDI 5000.81, Urgent Capability Acquisition, 31 December 2019

DoDI 5000.85, Major Capability Acquisition, 6 August 2020

DoDI 5000.87, Operation of the Software Acquisition Pathway, 2 October 2020

DoDI 5000.91, Product Support Management of the Adaptive Acquisition Framework, 4 November 2021

DoDI 5000.93, Use of Additive Manufacturing in the DoD, 10 June 2021

DoDM 5000.04, Cost and Software Data Reporting, 7 May 2021

HAFMD 1-12, Assistant Secretary of the Air Force (Financial Management and Comptroller), 13 June 2023

AFPD 65-5, Cost and Economics, 18 December 2018

AFI 33-322, Records Management and Information Governance Program, 23 March 2020

DAFI 63-101/20-101, Integrated Life Cycle Management, 16 February 2024

AFI 65-501, Economic Analysis, 29 October 2018

AFMAN 65-502, Inflation, 30 October 2018

AFMAN 65-506, Economic Analysis, 6 September 2019

DAFMAN 90-161, Publishing Processes and Procedures, 18 October 2023

MIL-STD-881F, Work Breakdown Structures for Defense Materiel Items, 13 May 2022

OSD CAPE Operating and Support Cost-Estimating Guide, September 2020

Joint Agency Cost Schedule Risk and Uncertainty Handbook, 12 March 2014

Prescribed Forms

None

Adopted Forms

DAF Form 847, Recommendation for Change of Publication

Abbreviations and Acronyms

ACAT—Acquisition Category

ADM—Acquisition Decision Memorandum

ADRL—Agreement Data Requirement List

AFCAA—Air Force Cost Analysis Agency

AFMAN—Air Force Manual

AFI—Air Force Instruction

AFPD—Air Force Policy Directive

AFRB—Air Force Review Board

AoA—Analysis of Alternatives

APB—Acquisition Program Baseline

APUC—Average Procurement Unit Cost

ARB—Acquisition Review Board

ATP—Authority to Proceed

BCAT—Business Acquisition Category

CADE—Cost Assessment Data Enterprise

CAIG—Cost Analysis Improvement Group

CAPE—Cost Assessment and Program Evaluation

CARD—Cost Analysis Requirements Description

CCE—Component Cost Estimate

CCP—Component Cost Position

CDF—Cumulative Distribution Function

CDRL—Contract Data Requirement Lists

CES—Cost Element Structure

CIPT—Cost Integrated Product Team

CRB—Cost Review Board

CRSB—Cost Reporting Standards Board

CSDR—Cost and Software Data Report

CSDR-RR—Cost and Software Data Report Readiness Review

CUI—Controlled Unclassified Information

CWG—Cost Working Group

CWIPT—Cost Working Integrated Product Team

DA—Decision Authority

DAE—Defense Acquisition Executive

DAES—Defense Acquisition Executive Summary

DAF—Department of the Air Force

DAFCARC—Department of the Air Force Cost and Resource Center

DAFI—Department of the Air Force Instruction

DAS—Defense Acquisition of Services

DBS—Defense Business System

DCAPE—Director Cost Assessment and Program Evaluation

DCARC—Defense Cost And Resource Center

DDCA—Deputy Director of Cost Assessment, CAPE

DEVSECOP—Development, Security, and Operations

DID—Data Item Description

DoD—Department of Defense

DoDD—Department of Defense Directive

DoDI—Department of Defense Instruction

DoDM—Department of Defense Manual

DRU—Direct Reporting Unit

EA—Economic Analysis

EP—Execution Phrase

EVM—Earned Value Management

FAR—Federal Acquisition Regulation

FRP—Full-Rate Production

FLDCOM—Field Command

FYDP—Future Years Defense Program

GR&A—Ground Rules and Assumptions

HAF—Headquarters Air Force

IAW—In Accordance With

ICE—Independent Cost Estimate

IOC—Initial Operating Capability

IPMDAR—Integrated Program Management Data and Analysis Report

LCCE—Life Cycle Cost Estimate

LRIP—Low-Rate Initial Production

MAJCOM—Major Command

MCA—Major Capability Acquisition

MD—Mission Directive

MDA—Milestone Decision Authority

MDAP—Major Defense Acquisition Program

MIL-STD—Military Standard

MILCON—Military Construction

MOA—Memorandum of Agreement

MTA—Middle Tier of Acquisition

NACA—Non-Advocate Cost Assessment

NDAA—National Defense Authorization Act

NLT—No Later Than

O&M—Operations and Maintenance

O&S—Operating and Support

OPR—Office of Primary Responsibility

OMB—Office of Management and Budget

OSD—Office of the Secretary of Defense

OTA—Other Transactional Authorities

PAUC—Program Acquisition Unit Cost

PEM—Program Element Monitor

PEO—Program Executive Officer

PM—Program Manager

PMO—Program Management Office

PMR—Project Management Report

POE—Program Office Estimate

POM—Program Objective Memorandum

PPM—Program Planning Module

PP—Planning Phase

RDT&E—Research Development Test and Evaluation

RFI—Request for Information

RFP—Request for Proposal

RF—Rapid Fielding

RP—Rapid Prototyping

SAE—Service Acquisition Executive

SAR—Selective Acquisition Reports

SBE—Single Best Estimate

SCA—Service Cost Agency

SCAT—Service Acquisition Category

SCP—Service Cost Position

SECDEF—Secretary of Defense

SEITPM—Systems Engineering, Integration and Test, and Program Management

SPPBE—Air Force Strategy, Planning, Programming, Budgeting, and Execution

SRDR—Software Resource Data Report

SRRB—Services Requirements Review Board

SSC—Space Systems Command

TA—Technical Advisor

TDR—Technical Data Report

T&E—Test & Evaluation

USC—United States Code

USSF—United States Space Force

WBS—Work Breakdown Structure

WSARA—Weapon Systems Acquisition Reform Act

Office Symbols

A3/5—Operations, Plans, & Requirements

A4—Logistics, Engineering, & Force Protection

AF/A8—Deputy Chief of Staff for Plans and Programs

AF/A8XP—Planning Integration Division

AFCAA—Air Force Cost Analysis Agency

AFCAA/TD—Air Force Cost Analysis Agency Technical Director

AFLCMC/FZC—Air Force Life Cycle Management Center, Cost and Economics Division

AFSC/FZC—Air Force Sustainment Center, Cost and Economics Division

ASD(A)—Assistant Secretary of Defense for Acquisition

OSD CA—Office of the Secretary of Defense, Cost Assessment

OSD CAPE—Office of the Secretary of Defense, Cost Assessment and Program Evaluation

OUSD A&S—Office of the Under Secretary of Defense for Acquisition & Sustainment

PMO—Program Management Office

SAF/AQ—Assistant Secretary of the Air Force for Acquisition, Technology & Logistics

SAF/AQX—Deputy Assistant Secretary for Acquisition Integration

SAF/FM—Assistant Secretary of the Air Force for Financial Management and Comptroller

SAF/FMB—Deputy Assistant Secretary for Budget

SAF/FMC—Deputy Assistant Secretary for Cost and Economics

SAF/FMCC—Cost Integration and Policy Division

SAF/MG—Deputy Under Secretary of the Air Force for Management

SAF/SQ—Office of the Assistant Secretary of the Air Force for Space Acquisition and Integration

SAF/SQX—Director of Space Integration

SF/S2—Deputy Chief of Space Operations for Intelligence

SF/S8—Deputy Chief of Space Operations for Strategy, Plans, and Programs

SSC/FM—Financial Manager for Space Systems Command

USD(A&S)—Under Secretary of Defense for Acquisition and Sustainment

Terms

Analysis of Alternatives (AoA)—A study conducted to explore numerous conceptual solutions with the goal of identifying the most promising options. The AoA is used to justify the rationale for formal initiation of the selected course of action.

Authority to Proceed (ATP)—Business systems, as outlined in the DoDI 5000.75, use ATP decision points rather than milestones.

Average Procurement Unit Cost (APUC)—Calculated by dividing total program procurement cost by the number of items to be procured. APUC is displayed in constant dollars of a base year fixed for each program. Total procurement cost includes flyaway, rollaway, sailaway cost (that is, recurring and nonrecurring costs associated with production of an item such as hardware/software, systems engineering, engineering changes and warranties), plus the costs of procuring technical data, training, support equipment, and initial spares.

Base Year (BY)—A reference period that determines a fixed price level for comparison in calculating economic escalation and cost estimates.

Business Acquisition Category (BCAT)—Business system categories established to facilitate decentralized decision making and execution and compliance with statutorily imposed requirements. The categories determine the level of review, decision authority, and applicable procedures.

Component Cost Estimate—Documents the cost analysis conducted by the SCA in cases where the SCA does not develop an ICE. This cost analysis may range from: a SCA non-advocate estimate, an independent SCA assessment of another government estimate, or other SCA cost analysis, as determined by the SCA and reflected in DoD Component policy.

Constant-Year Dollars (CY\$)—A cost that has been normalized relative to a selected base year via an inflation index. Constant-year dollars exclude the effect of inflation relative to the base year and include real price change. Also known as "real dollars" outside the DoD community.

Cost and Software Data Reporting (CSDR)—The CSDR system is the primary means that DoD uses to collect actual cost and related business data on ACAT I and ACAT IA defense contracts. Program Managers use the CSDR system to report data on contractor development and production costs and resource usage incurred in performing DoD programs.

Cost Estimate / Analysis—A documented analysis that predicts future costs, including profit, to develop and field a desired system. This requires evaluation of costs and risks of the development, production, operation, support, and disposal of a system. A key element of a comprehensive estimate is a cost risk / uncertainty analysis of relevant cost, schedule, and performance factors.

Cost Risk / Uncertainty Analysis—The process of quantifying the uncertainties associated with elements of the cost model such as cost estimating relationships (CERs), technical parameters that drive CERs, labor and other rates, and the schedule. The probability (risk) that a specific cost target will be exceeded is derived from the total uncertainty of the estimate.

Cumulative Distribution Function (CDF)—The CDF is a measure of how much a variable accumulates.

Defense Business Systems (DBS)—DBSs are information systems, other than a national security system (NSS), operated by, for, or on behalf of DoD, including financial systems, mixed systems,

financial feeder systems, and Information Technology and Information Assurance infrastructure. DBSs support business activities such as acquisition, financial management, logistics, strategic planning and budgeting, installations and environment, and human resource management.

Economic Analysis (EA)—A systematic approach to the problem of choosing how to use scarce resources to meet a given objective. It includes consideration of costs, benefits, risk, and uncertainty associated with all alternatives under consideration. At times, EA is used to reference the product/document that results from applying the EA systematic approach. This resulting document is also referred to as a comparative analysis.

Independent Cost Estimate (ICE)—A cost estimate / analysis prepared by an organization not directly responsible for the development, acquisition, or support of the program. The ICE must include a cost risk / uncertainty analysis and complete documentation.

Non-Advocate Cost Assessment (NACA)—An analysis of program cost / price, as well as schedule and technical risk, prepared by an organization not directly responsible for the development, acquisition, or support of the program. NACAs are designed to support the Department of the Air Force Corporate Structure and acquisition milestone decision process and can range from a simple sufficiency review of an existing estimate to a complete ICE. The NACA should include a cost risk / uncertainty analysis (when possible) and complete documentation.

Nunn—McCurdy Cost Breach—When MDAPs experience cost growth of 25% in PAUC or APUC from their current baseline or 50% from their original baseline, they are in a "critical" Nunn-McCurdy Unit Cost Breach. Programs in "critical" breach status are required to notify Congress, submit a SAR, and submit SECDEF certification (10 USC §2433) and are subject to detailed review for potential termination. The Nunn—McCurdy Amendment or Nunn—McCurdy Provision, introduced by Senator Sam Nunn and Congressman Dave McCurdy in the United States 1982 Defense Authorization Act and made permanent in 1983, is designed to curtail cost growth in American weapons procurement programs.

Program Acquisition Unit Cost (PAUC)—Computed by dividing the Program Acquisition Cost by the Program Acquisition Quantity. The PAUC and APUC are the subject of the Unit Cost Reports. Programs for which the current estimate of either the PAUC or APUC has increased by 15 percent or more over the currently approved APB or 30 percent or more over the originally approved APB must report a unit cost breach to the congressional defense committees.

Program Office Estimate (POE)—The cost estimate produced by the acquiring organization (i.e., Product Center, Air Logistics Center, or Laboratory).

Service Cost Position (SCP)—The SCP covers the entire life cycle of the program for all MDAPs prior to the Milestone A, B, and C reviews, and the Full-Rate Production Decision or Full Deployment Decision Review. The Air Force Deputy Assistant Secretary for Cost and Economics (or defense agency equivalent) must sign the SCP and include a date of record.

Then—Year Dollars (TY\$)—Costs that reflect the value of money at the time of a transaction. The type of transaction defines the two types of TY\$: obligations (which include outlay profiles) and expenditures (which do not include outlay profiles). Also known as "nominal dollars" outside the DoD environment.

Unit Cost Breach (potential Nunn—McCurdy Cost Breach)—MDAPs experiencing: a.) significant cost growth of 15% or more in PAUC or APUC over the current baseline estimate or

b.) 30% or more in PAUC or APUC over the original baseline estimate, are required to notify Congress of the cost growth and submit a SAR during the quarter the breach was determined.

ANNUAL COST ESTIMATE REQUIREMENT WAIVER REQUEST

Figure A2.1. Program Office Estimate Waiver Template.

Program Office Estimate (POE) Waiver

Program Name:			
be prepared and updated Tier Acquisition Program applicable. For the reason	alysis Guidance and Procedus annually on all Major Defen ms (MTAs) and other program ons listed below, the requirement. The last POE for	se Acquisition Programs (ms across all acquisition p program is requ	(MDAPs)/Middle- athways as sesting a waiver to
Rationale for waiver:			
The	program will complete a POE	by or before	
_	ned by the Program Manager, he Deputy Assistant Secretary		_
	Name	Signature	Date
Program Manager			
SAF/AQ, SAF/SQ or delegated PEO			
SAF/FMC			

Figure A2.2. Non-Advocate Assessment Waiver Template.

Non-Advocate Cost Assessment (NACA) Waiver

Program Name:			
updated annually on all Programs (MTAs) and of listed below, the respons	alysis Guidance and Procedu Major Defense Acquisition P other programs across all acqu sible authority (ent. The last NACA for the	rograms (MDAPs)/Mido nisition pathways as app) is requesting	lle-Tier Acquisition licable. For the reasons a waiver to the annual
Rationale for waiver:			
The	program will complete a NA(CA by or before	
_	ned by the AFCAA Division he Deputy Assistant Secretary	•	-
	Name	Signature	Date
AFCAA Division Chief			
SAF/AQ, SAF/SQ or delegated PEO			
SAF/FMC			

COST ESTIMATING DOCUMENTATION CHECKLIST FOR ACAT I, II AND III COST ESTIMATES

A3.1. Introduction.

- A3.1.1. Table of Contents.
- A3.1.2. Program title and Program Elements.
- A3.1.3. Reference to the current program decision, if applicable, and CARD.
- A3.1.4. Purpose and scope of the estimate.
- A3.1.5. Cost estimating team members listed by organization, phone number, and area of estimating responsibility.
- A3.1.6. Description of system or effort being estimated, with program phases estimated and excluded costs identified.
- A3.1.7. Program schedule; buy and delivery schedules.
- A3.1.8. Applicable contract information.
- A3.1.9. Cost estimate summary by fiscal year in Constant-Year and Then-Year dollars.
- A3.1.10. Ground rules and assumptions.

A3.2. Body.

- A3.2.1. Basis of estimate, by phase and appropriation, by Work Breakdown Structure (WBS) or Cost Element Structure (CES).
- A3.2.2. Detailed methods, sources, and calculations provided by WBS or CES along with fiscal year phasing and rationale for phasing.
- A3.2.3. Rationale for selecting a specific cost estimating method, by WBS or CES.
- A3.2.4. Source of data used when referencing analogous systems. Examples of analogous source data include, but are not limited to the:
 - A3.2.4.1. Selected Acquisition Report.
 - A3.2.4.2. Defense Acquisition Executive Summary.
 - A3.2.4.3. Integrated Program Management Data and Analysis Report (IPMDAR), formerly Contract Performance Report.
 - A3.2.4.4. Contractor Cost Data Report and Software Resources Data Report.
- A3.2.5. Cross checks, reasonableness and consistency checks addressed by WBS or CES. Specific references to studies, analogous systems or other appropriate documented references.
- A3.2.6. Track to prior estimate, and rationale for differences.
- A3.2.7. Reconciliation between the NACA/ICE and POE. **Note:** The body of the cost estimate documentation should provide information (source data, estimating methods, and results)

sufficient to make it possible for a qualified cost estimator to recreate the estimate using only the written documentation.

A3.3. Additional checklist considerations identify whether:

- A3.3.1. All life cycle costs are included.
- A3.3.2. Estimates are organized consistently and logically.
- A3.3.3. Learning curve slopes and factors are reasonable, similar system slopes and factors are included as cross checks.
- A3.3.4. Actual historical data at or near program completion was used, when available.
- A3.3.5. Current escalation and inflation rates were used, documented, and properly applied.
- A3.3.6. Historical data used is presented in the documentation, with rationale given as to why that data/program is applicable for use as an analogy and, where applicable, extrapolation is applicable.
- A3.3.7. Where systems have previously produced development or production units, unit or lot quantity and associated costs are provided.
- A3.3.8. Briefing charts reference program funding provided in the most current budget (President's Budget or POM). If shortfalls exist, a zero-shortfall option is provided.
- A3.3.9. Acronyms are defined.
- A3.3.10. Personnel costs are consistent with the Manpower Estimate Report, or deviations are properly explained.
- A3.3.11. Sensitivity analysis and risk/uncertainty analysis is documented.
- A3.3.12. Wrap rates and Forward Pricing Rate Agreement / Forward Pricing Rate Recommendation assumptions are included.

SCP KICKOFF AGENDA

A4.1. Introduction. All the items on the checklist below should be addressed at the milestone estimate kickoff meeting.

A4.2. Checklist.

- A4.2.1. Meeting held NLT 180 calendar days prior to the scheduled CRB.
- A4.2.2. Meeting Co-Chaired by SAF/FMC Deputy (or AFCAA Technical Director) and OSD CAPE Division Director (or delegated authority for CAPE delegation decision).
- A4.2.3. Meeting attendees.
 - A4.2.3.1. AFCAA Technical Director, Division Chief, and estimating staff.
 - A4.2.3.2. PMO Chief Engineer and Engineering staff, PMO estimating staff.
 - A4.2.3.3. Center Cost Staff.
 - A4.2.3.4. PEO (optional as desired by the PMO team), PEO staff (optional as desired by the PMO team).
 - A4.2.3.5. SAF/AQ or SAF/SQ PEM.
 - A4.2.3.6. AF/A8XP (or Space Force equivalent as applicable) Affordability Analysis OSD CAPE cost estimating staff.
- A4.2.4. Typical Meeting Agenda Items: Part I (full attendance).
 - A4.2.4.1. Program Overview PM (include acquisition strategy, system requirements and description, key assumptions provided in the CARD, current budget issues/concerns).
 - A4.2.4.2. CARD status/details –critical assumptions/info for estimators PMO.
 - A4.2.4.3. Challenges and Risks PM/Chief Engineer.
 - A4.2.4.4. Contractor Cost and Software Data Reporting (CSDR) plans and issues PMO and/or AFCAA.
 - A4.2.4.5. Independent schedule assessment plan AFCAA if delegated already or OSD.
 - A4.2.4.6. Affordability Process and Early Affordability Analysis/Charts/Conclusions AQX/A8 or SQX/S8.
 - A4.2.4.7. SCP Estimating process, plan, and schedule Overview AFCAA and PMO.
- A4.2.5. Part II (full group if interested but only mandatory for Technical Director with the PMO cost estimating, AFCAA cost estimating, and CAPE cost estimating staffs).
 - A4.2.5.1. SCP and ICE process and schedule discussion.
 - A4.2.5.1.1. Planned contractor visit(s) schedule overview.
 - A4.2.5.1.2. Interim reconciliations.
 - A4.2.5.1.3. Interim reviews/murder boards as required.

- A4.2.5.1.4. Meetings with CAPE (under either ICE or delegation process).
- A4.2.5.1.5. Pre-CRB, CRB, etc.
- A4.2.5.2. SCP Estimating Plan Deep Dive AFCAA and PMO.
 - A4.2.5.2.1. Review draft WBS & existing POE and NACA methodologies.
 - A4.2.5.2.2. Review cost track to any prior estimates if available (POEs and NACAs).
 - A4.2.5.2.3. Key Ground rules and Assumptions deep dive/discussions along with CARD deep dive questions/comments (if CARD had been available prior to kickoff).
 - A4.2.5.2.4. Discuss proposed methodologies to include sharing agreements.
 - A4.2.5.2.5. Discussion of available data and data issues (e.g., fidelity, gaps, issues) to include sharing agreements.
 - A4.2.5.2.6. Planned contractor visits and expectations for visits.
- A4.2.6. Subject Matter Expert support.

COST ESTIMATES FOR ACQUISITION PATHWAYS

A5.1. Major Capability Acquisition (MCA).

- A5.1.1. When delegated by the DCAPE, AFCAA will develop the ICE. The ICE will inform the SCP.
- A5.1.2. The DAF will develop SCPs for MCA pathway programs when CAPE elects to conduct an ICE on any program, or for ACAT I programs and major subprograms at the following events:
 - A5.1.2.1. Upon request of the MDA.
 - A5.1.2.2. At any time considered appropriate by the DCAPE.
 - A5.1.2.3. Prior to any Milestone A or B Review.
 - A5.1.2.4. Prior to any decision to enter Low-Rate Initial Production (LRIP) or Full-Rate Production (FRP).
 - A5.1.2.5. Critical unit cost growth breach (also referred to as critical Nunn-McCurdy breach).
- A5.1.3. The DAF will develop NACAs for MCA pathway programs for ACAT I programs and major subprograms:
 - A5.1.3.1. Upon request of the MDA.
 - A5.1.3.2. When an SCP is required (**Exception:** When CAPE delegates the ICE there will not be a NACA informing the SCP).
 - A5.1.3.3. At development RFP release. When delegated by CAPE, the NACA will serve as the cost analysis in support of this decision.
 - A5.1.3.4. For significant unit cost growth breach (also referred to as significant Nunn-McCurdy breach).
 - A5.1.3.5. For post-IOC sustainment reviews, to track O&S costs annually throughout the lifecycle of the program.
 - A5.1.3.6. Annually in support of the DAF Corporate Structure POM build.
 - A5.1.3.7. For pre- or post-Milestone B, pre- or post-Milestone C, MTA to MCA transition decisions, or other milestone variations when applicable. AFCAA will also consider conducting an SCP to inform the MDA.
- A5.1.4. The DAF will develop NACAs for MCA pathway programs for below ACAT I thresholds at the request of the MDA and approval by SAF/FMC.
- A5.1.5. The DAF will develop and update POEs for MCA pathway programs for all ACAT level programs:
 - A5.1.5.1. Upon request of the MDA.
 - A5.1.5.2. When an SCP is required.

- A5.1.5.3. Prior to any Milestone A or B Certification.
- A5.1.5.4. At development RFP release.
- A5.1.5.5. Prior to any decision to enter LRIP or FRP.
- A5.1.5.6. For significant and critical unit cost growth breaches.
- A5.1.5.7. For post-IOC annual O&S estimates, to track O&S costs annually throughout the lifecycle of the program.
- A5.1.5.8. Annually and in accordance with local policy.

A5.2. Middle Tier of Acquisition (MTA).

- A5.2.1. Rapid Prototyping (RP).
 - A5.2.1.1. The DAF will develop a cost estimate for RP pathway programs when delegated by the DCAPE.
 - A5.2.1.2. The DAF will provide a NACA, and may provide an SCP, for each RP program in sufficient time to inform the MTA Advisory Board. AFCAA will provide a summary of the final cost estimate in a dated memorandum signed by SAF/FMC, or delegated authority, and deliver copies to the relevant acquisition executives, program manager(s), MTA governance board, and OSD CAPE. As needed, any organization within the DAF will work closely with SAF/FMC, SAF/AQX, and SAF/SQX to ensure timely cost estimates for RP programs.
 - A5.2.1.3. The DAF may develop SCPs should the CAPE elect to conduct an estimate of costs at any event. The DAF will develop SCPs for RP pathway programs if the program is likely to exceed ACAT I thresholds at the following events:
 - A5.2.1.3.1. Upon request of the MDA.
 - A5.2.1.3.2. Pre-contract award.
 - A5.2.1.4. The DAF will develop NACAs for RP pathway programs if program is likely to exceed ACAT I thresholds at the following acquisition events:
 - A5.2.1.4.1. Program Entrance (MTA Advisory Board).
 - A5.2.1.4.2. When an SCP is required.
 - A5.2.1.4.3. RFP release.
 - A5.2.1.4.4. Other major decision point (e.g., MTA Advisory Board other than at Program Entrance).
 - A5.2.1.4.5. Annually in support of the DAF Force Corporate Structure POM build.
 - A5.2.1.4.6. Below ACAT I thresholds at the request of the MDA and approval by SAF/FMC.
 - A5.2.1.5. The DAF will develop POEs for all RP pathway programs at the below acquisition events. All POEs developed in support of RP pathway programs are subject to review by the Center Cost Staff and/or AFCAA. Center Cost Staff guidance may direct a Center Cost Staff review or defer the review requirement to AFCAA.

- A5.2.1.5.1. When an SCP is required.
- A5.2.1.5.2. Program Entrance (MTA Advisory Board).
- A5.2.1.5.3. RFP release.
- A5.2.1.5.4. Other major decision point (e.g., MTA Advisory Board other than at Program Entrance).
- A5.2.1.5.5. Annually and in accordance with local policy.
- A5.2.2. Rapid Fielding (RF).
 - A5.2.2.1. The DAF will develop the estimate of life cycle costs for RF pathway programs when delegated by the DCAPE.
 - A5.2.2.2. The DAF will provide an estimate of life cycle costs for each RF program in sufficient time to inform the MTA Advisory Board. AFCAA will provide a summary of the final cost estimate in a dated memorandum signed by SAF/FMC, or delegated authority, and deliver copies to the relevant acquisition executives, program manager(s), MTA governance board, and OSD CAPE. As needed, any organization within the DAF will work closely with SAF/FMC, SAF/AQX, and SAF/SQX to ensure timely cost estimates for RF programs.
 - A5.2.2.3. The DAF may develop SCPs should the CAPE elect to conduct an estimate of life cycle costs at any event. The DAF will develop SCPs for RF pathway programs if program is likely to exceed ACAT I thresholds at the following events:
 - A5.2.2.3.1. Upon request of the MDA.
 - A5.2.2.3.2. Pre-contract award.
 - A5.2.2.4. The DAF will develop NACAs for RF Pathway Programs if program is likely to exceed ACAT I thresholds at the following acquisition events:
 - A5.2.2.4.1. Program Entrance (MTA Advisory Board).
 - A5.2.2.4.2. RFP release.
 - A5.2.2.4.3. Other major decision point (e.g., MTA Advisory Board other than at Program Entrance).
 - A5.2.2.4.4. Annually in support of the DAF Corporate Structure POM build.
 - A5.2.2.4.5. When an SCP is required.
 - A5.2.2.4.6. Below ACAT I thresholds at the request of the MDA and approval by SAF/FMC.
 - A5.2.2.5. The DAF will develop POEs for all RF pathway programs at the below acquisition events. All POEs developed in support of RF pathway programs are subject to review by the Center Cost Staff and/or AFCAA. Center Cost Staff guidance may direct a Center Cost Staff review or defer the review requirement to AFCAA.
 - A5.2.2.5.1. Upon request of the MDA.
 - A5.2.2.5.2. When CAPE elects to conduct an estimate of life cycle costs on any program.

- A5.2.2.5.3. When an SCP is required.
- A5.2.2.5.4. Program Entrance (MTA Advisory Board).
- A5.2.2.5.5. RFP release.
- A5.2.2.5.6. Other major decision point (e.g., MTA Advisory Board other than at Program Entrance).
- A5.2.2.5.7. Annually and in accordance with local policy.
- A5.2.3. All estimates for MTA pathway programs will ensure estimated costs for the period of the MTA pathway program are clearly delineated from the remainder of any life cycle costs.

A5.3. Software Acquisition Pathway Programs.

- A5.3.1. The DAF will develop the estimate of costs for Software Acquisition pathway programs when delegated by the DCAPE.
- A5.3.2. The DAF may develop SCPs should the CAPE elect to conduct an estimate of costs at any event. The DAF will develop SCPs for Software Acquisition pathway programs if the program is likely to exceed ACAT I thresholds at the following events:
 - A5.3.2.1. Upon request of the MDA.
 - A5.3.2.2. Before the program enters the Execution Phase (EP).
- A5.3.3. The DAF will develop NACAs for Software Acquisition pathway programs if program is likely to exceed ACAT I thresholds at the following events:
 - A5.3.3.1. Before the program enters the EP.
 - A5.3.3.2. Other major decision point.
 - A5.3.3.3. Annually in support of the DAF Corporate Structure POM build.
 - A5.3.3.4. When an SCP is required.
 - A5.3.3.5. Below ACAT I thresholds at the request of the MDA and approval by SAF/FMC.
- A5.3.4. The DAF will develop POEs for all Software Acquisition pathway programs at the following events:
 - A5.3.4.1. Upon request of the MDA.
 - A5.3.4.2. When an SCP is required.
 - A5.3.4.3. Before the program enters the Planning Phase.
 - A5.3.4.4. Other major decision point.
 - A5.3.4.5. Annually and in accordance with local policy.
- A5.3.5. Cost estimates required before the program enters the EP should consider the technical content described in the approved Capability Needs Statement, User Agreement, Acquisition Strategy, and Test Strategy.

A5.4. Defense Business System Pathway Programs.

- A5.4.1. The DAF may develop SCPs for DBS pathway programs should CAPE elect to perform a cost estimate on any DBS program or for all BCAT I programs at the following acquisition events:
 - A5.4.1.1. Upon request of the MDA.
 - A5.4.1.2. Pre-contract award.
 - A5.4.1.3. Limited Deployment ATP.
 - A5.4.1.4. Full Deployment ATP.
 - A5.4.1.5. Capability Support ATP.
 - A5.4.1.6. Below BCAT I thresholds at the request of the MDA and approval by SAF/FMC.
- A5.4.2. The DAF will develop NACAs for Software Acquisition pathway programs if program is likely to exceed BCAT I thresholds at the following events:
 - A5.4.2.1. Upon request of the MDA.
 - A5.4.2.2. Acquisition ATP.
 - A5.4.2.3. RFP release.
 - A5.4.2.4. Pre-contract award.
 - A5.4.2.5. Limited Deployment ATP.
 - A5.4.2.6. Full Deployment ATP.
 - A5.4.2.7. Capability Support ATP.
 - A5.4.2.8. Other major decision point.
 - A5.4.2.9. Annually and in accordance with local policy.
 - A5.4.2.10. When an SCP is conducted.
- A5.4.3. The DAF will develop POEs for all DBS pathway programs at the following events:
 - A5.4.3.1. Upon request of the MDA.
 - A5.4.3.2. When CAPE elects to conduct a cost estimate.
 - A5.4.3.3. When an SCP is conducted.
 - A5.4.3.4. Solution Analysis ATP.
 - A5.4.3.5. Functional Requirements ATP.
 - A5.4.3.6. Acquisition ATP.
 - A5.4.3.7. RFP release.
 - A5.4.3.8. Pre-contract award.
 - A5.4.3.9. Limited Deployment ATP.
 - A5.4.3.10. Full Deployment ATP.

- A5.4.3.11. Capability Support ATP.
- A5.4.3.12. Other major decision point.
- A5.4.3.13. Annually and in accordance with local policy.

A5.5. Defense Acquisition of Services.

- A5.5.1. The DAF may develop SCPs for Defense Acquisition of Services programs upon request of the MDA or should CAPE elect to conduct a cost estimate on any acquisition of contracted services.
- A5.5.2. The DAF may develop SCPs for all Defense Acquisition of Services programs if program is likely to exceed Service Acquisition Category (SCAT) I thresholds or designated as Special Interest by the USD(A&S) or Assistant Secretary of Defense for Acquisition (ASD(A)) at the following events:
 - A5.5.2.1. Prior to the Services Requirements Review Board (SRRB) approval of the services acquisition strategy.
 - A5.5.2.2. For all other SCAT thresholds at the request of the MDA and approval by SAF/FMC.
- A5.5.3. The DAF will develop NACAs for Defense Acquisition of Services programs if program is likely to exceed SCAT I thresholds or if designated as Special Interest by the USD(A&S) or ASD(A) at the following events:
 - A5.5.3.1. Prior to the Services Requirements Review Board (SRRB) approval of the services acquisition strategy.
 - A5.5.3.2. Other major decision point.
 - A5.5.3.3. Annually in support of the DAF Corporate Structure POM build.
 - A5.5.3.4. When an SCP is conducted.
 - A5.5.3.5. All other SCATs at the request of the MDA and approval by SAF/FMC.
- A5.5.4. The DAF will develop POEs for all Acquisition of Services at the following events:
 - A5.5.4.1. When CAPE elects to conduct a cost estimate.
 - A5.5.4.2. Upon request of the MDA.
 - A5.5.4.3. When an SCP is conducted.
 - A5.5.4.4. Prior to the SRRB approval of the Services Acquisition Strategy.
 - A5.5.4.5. Other major decision point.
 - A5.5.4.6. Annually and in accordance with local policy.