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Financial Management

COST ESTIMATE DOCUMENTATION

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction establishes documentation requirements and review procedures for all cost estimates. It implements AFMCPD 65-2, *Air Force Materiel Command Cost Analysis Program*. It does not apply to the Air National Guard or US Air Force Reserve units and members.

SUMMARY OF REVISIONS

This revision aligns the instruction to the new format, there are no major revisions.

1. Policy for Documenting and Reviewing cost Estimates:

- 1.1. Documentation must support the credibility of the estimate, provide a cost track showing the history of why costs change, enable a reviewer to replicate the cost estimate, and provide a data base for future estimates.
- 1.2. A center and laboratory comptroller will review the cost estimate to verify that it conforms with good estimating practices. Cost estimates will be made available to higher headquarters comptroller organizations as required for various cost and program reviews.

2. Responsibilities for Reviewing and Documenting Cost Estimates. HQ AFMC/FMC is responsible for:

- 2.1. Developing policy and procedures to document and review program costs.
- 2.2. Reviewing of field supplements to this regulation in coordination with appropriate HQ AFMC staff.

3. Cost Estimate Documentation Guidelines:

3.1. Cost estimate documentation is a detailed record of the procedures, data, environment, and events resulting in the development or update of an estimate. Cost estimate content and documentation requirements are specifically outlined in Attachment 1. All cost estimates must contain the information in paragraph 1a through 1i of Attachment 1. Information detailed in paragraph 2 of Attachment 1 will be included as appropriate.

3.2. The required level of detail in each cost estimate is flexible and will vary depending on the purpose of the estimate, dollar value of the estimate and use to be made of the documentation.

3.3. Documentation for a major program estimate must be extensive and detailed. A major program, as defined in draft DODD 5000.1, *Defense Acquisition*, is one with a research, development, test, and evaluation estimate of at least (\$300 million based on FY90 constant dollars) or a production estimate of at least (\$1.8 billion based on FY90 constant dollars).

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Attachment 1

COST ESTIMATE CONTENT AND DOCUMENTATION REQUIREMENTS

1. Introductory. All cost estimate documentation should be paginated and dated. Documentation will begin with a table of contents followed by a narrative summary section. The summary section will briefly address the following subheadings, if they apply:

- a. Purpose of the Estimate. Briefly state if it is an initial or updated estimate. If updated, identify the prior estimate and where the cost track can be found in the documentation .
- b. Team Composition. Identify all estimating team members, their organization, telephone, and estimate responsibility.
- c. Description of the Program. Include information such as detailed technical and programmatic description, pictures, performance parameters, acquisition strategies, and other meaningful information.
- d. Scope of the Estimate. Describe program phases and appropriations.
- e. Program Schedule. Provide master schedule for all program phases and include detailed fiscal year buy and delivery schedule.
- f. Contract Information. Identify contract types, options, contract status, share ratios, special clauses, etc.
- g. Cost Estimate Summary. Provide time phased dollars by cost element structure (CES) and/or work breakdown structure (WBS) in program constant year, current year, and then year dollars, as appropriate.
- h. Round Rules and Assumptions. List all technical and programmatic conditions, estimating ground rules, constraints, and assumptions pertaining to the estimate.
- i. Methodology. Provide a brief overview of the primary methodology used to develop the estimate. Include a table summarizing the method by CES/WBS and, if appropriate, by functional breakout.

2. Detailed Documentation: Cost estimates will include as appropriate:

a. A listing and definition of the CES/WBS. All costs for systems will be estimated by CES/WBS. Functional breakouts will be made to assist in describing how the estimate was developed. The CES/WBS used will be consistent with the format for the cost estimate and Air Force cost data collection and reporting. Refer to MIL-STD-881B and the OSD CAIG Operating & Support Cost Estimating Guide.

b. For each element, provide the following information:

- (1) Title of Element. This section should be repeated for each element.
- (2) Fiscal Year (FY) Spread. This is a fiscal year spread of the element in current year dollars.
- (3) Element Content. Briefly describe what is being estimated within the element.
- (4) Estimating and FY Spread Procedures. Give a brief overview of the methods used to estimate and fiscally phase the element.
- (5) Detailed Description of Estimate Basis. Sufficient information must be given in this section to allow replication of the estimate by a cost analyst unfamiliar with the program. If necessary, include sample calculations. The following checklist should be used to ensure all pertinent information is included:
 - (a) Labor rates

- (b) Labor hours
- (c) Material and subcontract costs
- (d) Learning curves
- (e) Factors and cost estimating relationships
- (f) Cost models
- (g) Analogous system data
- (h) Inflation Indices
- (i) Estimator judgment
- (j) Basis for fiscal year phasing
- (k) Review of existing estimates
- (l) Tests of reasonableness
- (m) Allocation base

c. A detailed description of the cost estimating methodology to clearly show:

- (1) Actual cost values used from current contracts or analogous programs
- (2) Regression or other analysis used, including development of a First Unit cost (T1) and cost improvement curves
- (3) Source of direct labor hours and overhead rates
- (4) Source of material estimates
- (5) Basis or source of all factors used to estimate costs and application of their base
- (6) Development or source of cost estimating relationships
- (7) Development or source of cost models and parametric input

d. Risk Assessments. Describe any areas of uncertainty, such as pending negotiations, concurrency, schedule risk, performance requirements that are not yet firm, appropriateness of analogous systems, level of knowledge about support concepts, critical assumptions, etc.

e. Sensitivity Analyses. Describe any sensitivity analyses performed and the impact of changing variables on the entire estimate.

3. Use of Contractor Cost Estimates. When using contractor cost estimates as the basis for program estimates, explain all cross-checks performed on contractor estimates and conclusions. Explain the analyses and reviews of any defense Contract Audit Agency and Defense Plant Representative Office reports used as the basis of the estimate. Contractor Rough Order of Magnitude (ROM) estimates, non-negotiated contractor proposals and contractor Design to Cost estimates are not acceptable sources of reference estimates going to the Air Force or OSD Cost Analysis Improvement Group (CAIG) reviews.

4. Learning Curve Plot Points. If a substantial portion of a production estimate is based on a composite or single cost improvement curve, a plot of this curve shall clearly show plot points. These plot points shall be based on historical data, forecast points used to develop the estimate, First unit costs (T1 values) and the slopes at all points along the curve.

5. Cost Track. A cost track is required whenever an estimate changes. Documentation must include dollar amounts and precise reasons for cost changes. The cost track should be in program base year and then year dollars.