

Procurement Advisory No. 80

Requirement for Use of an Earned Value Management System (EVMS)

1. INTRODUCTION

The purpose of this Procurement Advisory is to establish policy and procedures for incorporating requirements for Earned Value Management (EVM) Systems in Department of Agriculture (USDA) contracts and orders for major information technology (IT) investments.

2. SUMMARY

Use of an EVMS for USDA IT investments enables investment/program managers and senior management to better track the progress of IT investments and enhances USDA's ability to make informed decisions concerning these investments. EVM is a project management technique that measures the actual progress of a project, taking into account the work completed, the time taken and the costs incurred. This information can then be compared to the original project estimates to enable the investment/program manager to assess the actual versus planned progress of the project. The USDA Office of the Chief Information Officer (OCIO) has established requirements for use of EVM on major IT investments. This Procurement Advisory recaps these OCIO requirements and establishes policy and procedures for including requirements for EVM systems in USDA contracts.

3. SPECIFIC ISSUES:

- BACKGROUND

- Title V of the Federal Acquisition Streamlining Act of 1994 (FASA) required agency heads to approve or define the cost, performance and schedule goals for major acquisitions and achieve, on average, 90% of the cost, performance and schedule goals established.
- The Clinger-Cohen Act of 1996 directed the Office of Management and Budget (OMB) to develop, as part of the budget process, a process for analyzing, tracking and evaluating the risks and results of all major capital investments for information systems for the life of the system.
- OMB Circular A-11, Part 7, Planning, Budgeting, Acquisition and Management of Capital Assets, and the supplement to Part 7, the Capital Programming Guide, were written to meet the statutory requirements of FASA and the Clinger-Cohen Act.
- OMB Circular A-11, Part 7, Section 300, instructs Federal executive agencies on the budget justification and reporting requirements for major investments. Section 300.7 requires that these executive agencies submit an Exhibit 300, Capital Asset Plan and Business Case, for all major investments as part of the annual budget submission. As part of the funding decision process, each Exhibit 300 is scored by OMB.
- OMB Circular A-11, Part 7, further requires use of an EVMS that meets the American National Standards Institute (ANSI)/Electronics Industries Alliance (EIA) Standard 748 "for both Government and contractors costs, for those parts of the total investment requiring development

efforts (e.g., prototypes and testing in the planning phase and development efforts in the acquisition phase)” and requires that agencies “show how close the investment is to meeting the approved cost, schedule and performance goals.”

- The USDA Information Technology Capital Planning and Investment Control (CPIC) Guide establishes the process and strategies for USDA’s management of its IT investment portfolio and establishes the thresholds and criteria for determining which USDA IT projects are deemed to be major IT investments. The USDA CPIC includes implementing information on the preparation and submission of Exhibit 300s to OMB via the USDA OCIO.
- USDA Departmental Regulation (DR) 3130-006, “Information Technology Earned Value Management,” defines the policies and responsibilities, for using and reporting EVM for major USDA IT investments. (<http://www.ocio.usda.gov/directives/#3000link>)
- USDA Chief Information Officer (CIO) and USDA Senior Procurement Executive (SPE) memoranda of November 22, 2005 and September 29, 2004 provide additional USDA policy and guidance for incorporating EVM requirements in major IT investments.
- There is currently a Federal Acquisition Regulation (FAR) case in process to establish requirements for inclusion of EVMS provisions and clauses in solicitations and contracts. This Procurement Advisory will be modified, as necessary to comply with the FAR upon issuance of the formal change.
- REQUIREMENTS FOR EVM IN USDA MAJOR IT INVESTMENTS
 - DR 3130-006 establishes thresholds for application of USDA EVM policy for major IT investments. These thresholds apply only to the development, modernization or enhancement (D/M/E) expenditures of a major IT investment.
 - DR 3130-006 requires:
 - Compliance with the ANSI/EIA-748-A EVM Standard for:
 - (1) All new major IT investments (major applications) for which agencies are planning to spend more than \$20 million in D/M/E for application development over the agency-defined life cycle.
 - (2) All major IT investments that are currently in process and are budgeted for more than \$20 million in D/M/E during the remainder of the life cycle.
 - All major IT investments that have planned budgets in excess of \$50 million in D/M/E over the defined life cycle must be compliant with the ANSI/EIA-748 EVM Standard and must have a written certification, provided to OCIO, that the EVM system being used is in full compliance with the ANSI/EIA-748 EVM Standard.
 - Pursuant to DR 3130-006 and USDA CIO and SPE memorandum of November 22, 2005:
 - The D/M/E dollars thresholds apply to the total D/M/E cost for the investment including all contracted and in-house work. Data collected from each contracted and in-house element of the project will be combined to measure and report an investment’s performance.

- For IT investments requiring an EVMS, for which IT investment integration will be performed under a contract, the solicitations and contracts may require inclusion of an EVMS provision and clause.
 - Contracts that support IT investments requiring EVM systems, but which are not the IT investment integration contracts, must include requirements for the contractor to provide reports of EVM data for all D/M/E costs to the investment integrator (either the Government or Contractor integrator).
 - The thresholds and criteria for determining whether an EVMS is required for specific IT investments are established by the USDA OCIO and are based on estimated costs of the IT investments. The agency investment/program manager has primary responsibility for determining whether an EVMS is required for a specific in-house IT investment. The agency investment/program manager and the contracting officer are jointly responsible for determining if, and to what extent, the EVMS requirement will be applied to contracts.
- **POLICY AND PROCEDURES FOR INCLUSION OF REQUIREMENTS FOR EVMS IN SOLICITATIONS AND CONTRACTS**
 - The determination of whether a solicitation/contract should include a requirement for a contractor to have an EVMS must be coordinated between the IT investment/program manager and the contracting officer. The determination of whether an EVMS is required for an investment is based on the estimated D/M/E costs for the IT investment. The determination of whether a particular solicitation/contract must include a provision and clause requiring the contractor to have an EVMS is based on the purpose of the contract, the contract type and the estimated contract value. For IT investments for which the Government is the integrator, the types of reports and information required from contractors providing support must be developed by the investment/program manager and the contracting officer based on the contract type and value.
 - Solicitations and contracts shall include a requirement for an EVMS that is compliant with ANSI/EIA Standard 748, in accordance with the following.
 - Cost-reimbursement or incentive contracts (as defined in FAR part 2 and subparts 16.3 and 16.4) with estimated values (including options) over \$20 million up to and including \$50 million shall include a requirement for an EVMS compliant with ANSI/EIA Standard 748.
 - Cost-reimbursement or incentive contracts (as defined in FAR part 2 and subparts 16.3 and 16.4) with estimated values (including options) over \$50 million shall include a requirement for an EVMS that:
 - (1) is compliant with ANSI/EIA Standard 748; and
 - (2) in accordance with DR 3130-006 has been certified as being in full compliance with the ANSI/EIA 748 EVM Standard.
 - Firm-fixed price, time and materials and labor hour contracts should not normally include a requirement for an EVMS, regardless of dollar value. However, a requirement for an EVMS compliant with ANSI/EIA Standard 748 may be included in such contracts valued at over \$20 million when the contract requirements are solely for development, and the necessary

cost and schedule information cannot be obtained absent such a requirement. In these instances the acquisition plan for the contract shall set forth the rationale for the determination to include a requirement for an EVMS compliant with ANSI/EIA Standard 748.

- Contracts of any type valued at \$20 million or less if the contracting officer and IT investment/program manager determine that an ANSI/EIA Standard 748 compliant EVMS is needed. When such a determination is made, the Acquisition Plan shall set forth the rationale for the inclusion of the requirement for an ANSI/EIA Standard 748 compliant EVMS was made.
- An integrated baseline review (IBR) is a joint assessment by the contractor and the Government, intended to provide a mutual understanding of the inherent risks in the contractor's performance plans and the underlying management control systems. Under contracts that include a requirement for an EVMS, the IT investment/program manager may determine that an IBR is required. If required, the IBR will usually be conducted after contract award. If a pre-award IBR is considered necessary by the Government, the Acquisition Plan must discuss why a pre-award IBR is appropriate, including: (i) how it will be considered in the source selection decision, (ii) how it will be conducted in the source selection process, and (iii) whether offerors will be compensated when participating in a pre-award IBR.
- In general, the contracting officer will require contractors to submit EVM reports on a monthly basis.
- For an acquisition that includes a requirement for an EVMS (whether certified or not), the investment/program officer, with the assistance of the contracting officer, will include in the Acquisition Plan, a description of the methodology the Government will employ to analyze and use the earned value data provided by contractor's EVMS to assess and monitor contract performance. In addition, when a validated EVMS is required, the Acquisition Plan should include a discussion on how the contractor's EVMS will be validated for compliance with the standard; and if IBRs will be conducted, how they will be conducted.
- EVMS requirements will be applied to subcontractors using the same rules as applied to the prime contractor.
- INTERIM AGAR 434 AND 452 SOLICITATION PROVISION, CONTRACT CLAUSE AND USE PRESCRIPTIONS
 - 434.7001 Contracting officers shall include a provision and a clause that contain language similar to that in 452.234-70 and 452.234-71 in solicitations and contracts that require contractors to use a certified EVMS.
 - (a) If a pre-award integrated baseline review (IBR) is required, use Alternate I of 452.234-70.
 - (b) If a post-award integrated baseline review (IBR) is required, use Alternate I of 452.234-71.

434.7002 For solicitations and contracts that require an EVMS compliant with ANSI/EIA Standard 748, for which certification by the Government is not required, include in the statement of work a requirement similar to the following:

The contractor is required to have an Earned Value Management System that complies with ANSI/EIA Standard 748; however, Government review and certification of the contractor's management system is not required.

452.234-70 NOTICE OF EARNED VALUE MANAGEMENT SYSTEM (Dec 2005)

- (a) The offeror shall provide documentation that the Government has recognized that the proposed earned value management system (EVMS) complies with the EVMS guidelines in ANSI/EIA Standard 748 (current version at the time of solicitation).
- (b) If the offeror proposes to use a system that does not meet the requirements of paragraph (a) of this provision, the offeror shall submit a comprehensive plan for compliance with the EVMS guidelines.

(1) The plan shall -

- (A) Describe the EVMS the offeror intends to use in performance of the contracts;
- (B) Distinguish between the offeror's existing management system and modifications proposed to meet the guidelines;
- (C) Describe the management system and its application in terms of the EVMS guidelines;
- (D) Describe the proposed procedures for administration of the guidelines, as applied to subcontractors; and
- (E) Provide documentation describing the process and results of any third-party or self-evaluation of the system's compliance with the EVMS guidelines.

(2) The offeror shall provide information and assistance as required by the Contracting Officer to support review of the plan.

(3) The Government will review the offeror's plan for an EVMS before contract award.

(End of provision)

Alternate I: (Dec 2005) As prescribed in 434.7001(a), if a pre-award integrated baseline review (IBR) will be required, add the following paragraph (c) to the basic provision 452.234-70.

- (c) The Government will conduct an integrated baseline review (IBR), as designated by the agency, prior to contract award. The objective of the integrated baseline review is for the Government and the contractor to jointly assess technical areas, such as the contractor's planning, to ensure complete coverage of the contract requirements, logical scheduling of the work activities, adequate resources, methodologies for earned value and identification of inherent risks.

452.234-71 EARNED VALUE MANAGEMENT SYSTEM (Dec 2005)

- (a) In the performance of this contract the contractor shall use an earned value management system (EVMS) to manage the contract that at the time of contract award has been determined by the Government as compliant with the guidelines in ANSI/EIA Standard 748 (current version at time of award) and the contractor will submit reports in accordance with the requirements of this contract.
- (b) If, at the time of award, the Contractor's EVMS has not been determined by the Government as complying with EVMS guidelines (or the Contractor does not have an existing cost/schedule control system that is compliant with the guidelines in ANSI/EIA Standard 748 (current version at time of award)), the Contractor shall apply the system to the contract and shall be prepared to demonstrate to the Government that the EVMS complies with the EVMS guidelines referenced in paragraph (a) of this clause.
- (c) Unless a waiver is granted by the Contracting Officer, contractor proposed EVMS changes require approval of the Contracting Officer, prior to implementation. The Contracting Officer shall advise the contractor of the acceptability of such changes within 30 calendar days after receipt of the notice of proposed changes from the contractor. If the advance approval requirements are waived by the Contracting Officer, the contractor shall disclose EVMS changes to the Contracting Officer at least 14 calendar days prior to the effective date of implementation.
- (d) The contractor shall provide access to all pertinent records and data requested by the Contracting Officer or a duly authorized representative. Access is to permit Government surveillance to ensure that the EVMS conforms, and continues to conform, to the performance criteria referenced in paragraph (a) of this clause.
- (e) The contractor shall include this clause in subcontracts that are subject to the EVMS requirements of this contract.

(End of Clause)

Alternate I: (Dec 2005) As prescribed in 434.7001(b), if a post-award integrated baseline review (IBR) will be required, add the following paragraph (f) to the basic clause 452.234-71.

- (f) An Integrated Baseline Review (IBR) shall be scheduled as early as practicable after contract award, but not later than 180 days after award. An IBR will also be required at (1) exercise of significant options or (2) incorporation of major modifications. Such review will normally be scheduled before the exercise of the significant option or issuance of the major modification.

A copy of the joint USDA SPE and USDA CIO memoranda of [November 22, 2005](#) and [September 29, 2004](#), and a mini-glossary of terms used in this Advisory are attached.

4. CONTACTS

If you have questions about DR 3130-006, the application of EVM systems to IT investments, or the USDA OCIO thresholds, please contact Dan Stoltz, OCIO, by telephone at (202) 720-9080 or by email to dan.stoltz@usda.gov.

If you have questions or comments regarding this advisory please contact Curt Brown by telephone at 202.720.0840 or email at Curt.Brown@dm.usda.gov, or send an email message to the OPPM Procurement Policy Division at procurement.policy@dm.usda.gov.

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EXPIRATION DATE: Effective upon issue date until canceled.

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