

OFFICE OF MANAGEMENT AND BUDGET

Office of Federal Procurement Policy

Value Engineering

AGENCY: Office of Management and Budget, Office of Federal Procurement Policy

ACTION: Proposed revision to Office of Management and Budget Circular No. A-131, "Value Engineering"

SUMMARY: The Office of Federal Procurement Policy (OFPP) in the Office of Management and Budget (OMB) is proposing to revise OMB Circular A-131, *Value Engineering*, to update and reinforce policies associated with the consideration and use of Value Engineering (VE). VE is an effective technique for cutting waste and inefficiency -- helping Federal agencies save billions of dollars in program and acquisition costs, improve performance, enhance quality, and foster the use of innovation. The proposed revisions are designed to ensure that the Federal Government has the capabilities and tools to consider and apply VE techniques to the maximum extent appropriate.

DATE: Interested parties should submit comments in writing to the address below on or before July 24, 2012.

ADDRESSES: Comments may be submitted by any of the following methods:

- Online at: <http://www.regulations.gov>
- Facsimile: 202-395-5105
- Mail: Office of Federal Procurement Policy, ATTN: Curtina Smith, New Executive Office Building, Room 9013, 724 17th Street, NW., Washington, DC 20503.

Instructions: Please submit comments only and cite "Proposed Revision to OMB Circular A-131" in all correspondence. All comments received will be posted, without change or redaction, to www.regulations.gov, so commenters should not include information that they do not wish to be posted (for example because they consider it personal or business confidential).

FOR FURTHER INFORMATION CONTACT: Curtina Smith, OFPP, csmith@omb.eop.gov.

OMB proposes the following revised version of Circular A-131:

Proposed Revision for Comment¹

TO THE HEADS OF EXECUTIVE DEPARTMENTS AND ESTABLISHMENTS

SUBJECT: Value Engineering

1. Purpose. The purpose of this Circular is to require that Federal Departments and Agencies sustain a value engineering (VE) program. To be an effective management tool, the agency's VE program should include policies and procedures to ensure VE is considered and integrated into the planning and development of all appropriate programs, projects, activities, as well as contracts for supplies and services, including architect-engineering services and construction services, to reduce program and acquisition costs, improve performance, enhance quality, and foster the use of innovation.
2. Supersession Information. This Circular supersedes and cancels OMB Circular No. A-131, *Value Engineering*, dated May 21, 1993.
3. Authority. This Circular is issued pursuant to 41 U.S.C. 1121, 1711.
4. Overview. VE is a methodology for analyzing functions of an item or process to determine "best value," or the best relationship between worth and cost. "Best value" is represented by an item or process that consistently performs the required basic function at the lowest life-cycle cost while maintaining acceptable levels of performance and quality. For purposes of this Circular, VE is considered synonymous with value analysis, value management, value planning, and value control.

VE can be used as a stand-alone tool or with other management techniques and methodologies to improve performance and quality and reduce costs. The complementary relationship between VE and other management improvement processes increases the likelihood that overall management objectives are achieved. For example, VE can be used with lean six sigma analyses to challenge requirements, identify functions that cost more than they are worth, and integrate innovative practices, technologies, and products. In addition, life-cycle costing, cost as an independent variable, concurrent engineering, and design-to-cost approaches are effective analytical tools for process and product improvement that can also be used with VE analysis to achieve management objectives.

A VE analysis can also be used with acquisition management techniques to improve performance and quality, lower or manage costs, and shorten project delivery. For example, VE analysis can be successfully integrated into acquisitions that use performance-based specifications, the design-build project delivery process, or integrated product/project/process teams (IPTs).

VE contributes to the overall management objectives of streamlining operations, improving quality, and reducing or avoiding costs. The results of VE may indicate that "best value"

¹ A copy of the preamble describing the proposed revisions reflected in this document was published in the Federal Register on June 8, 2012 and is available at <http://federalregister.gov/a/2012-13903>.

requires an initial expenditure of funds in order to meet basic functions at a lower cost over the life of the project, program, or system. VE can result in the increased use of innovative materials, technologies or practices, and environmentally-sound and energy-efficient practices and materials. For example, the application of VE to facilities construction can yield a better value when the development, design, acquisition, and construction phases of the project are approached in a manner that considers community and environmental commitments and project constraints, and incorporates environmentally-sound and energy-efficient practices and materials.

While VE may be successfully introduced at any point in the life-cycle of products, systems, projects, or procedures, the greatest potential for savings are when VE is applied during the planning, design, and other early phases of project/program/system/product development since the early phases are when most of the costs are committed, opportunities for change are greater, and changes cost less to implement.

5. Background. The VE methodology originated during World War II in the industrial community and was adopted by Federal government agencies that recognized its potential for yielding a large return on investment. VE has frequently been cited as an effective technique for fostering utilization of innovative practices, technologies, and products to lower cost while maintaining necessary quality and performance levels. VE has been applied to hardware and software; development, production, and manufacturing; specifications, standards, contract requirements, and other acquisition program documentation; and facilities design and construction.
6. Definitions.
 - a. Agency. As used in this Circular, the term “agency” means an executive department, a military department, a Government Corporation, or an independent establishment within the meaning of sections 101, 102, 103(1), and 104(1), respectively, of Title 5, United States Code.
 - b. Life-cycle cost. The total cost of a system, building, program, project, or other product, computed over its useful life. It includes all relevant costs involved in acquiring, owning, operating, maintaining, and disposing of the system, project or product over a specified period of time, including environmental and energy costs.
 - c. Cost savings. A reduction in actual expenditures below the projected level of costs to achieve a specific objective.
 - d. Cost avoidance. An action taken in the immediate time frame that will decrease costs in the future. For example, an engineering improvement that increases the mean time between failures and thereby decreases operation and maintenance costs is a cost avoidance action. Cost avoidance may be considered an additional benefit to quality or other non-quantifiable value engineering improvement.

- e. In-house savings. Net life-cycle cost savings achieved by in-house agency staff using VE techniques.
 - f. Contracted savings. Net life-cycle cost savings realized by contracting for the performance of a VE study or by a value engineering change proposal (VECP) submitted by a contractor.
 - g. Capital assets. Capital assets are land (including parklands), structures, equipment (including motor vehicle and aircraft fleets), and intellectual property (including software) which are used by the Federal Government and have an estimated useful life of two years or more. Capital assets exclude items acquired for resale in the ordinary course of operations or held for the purpose of physical consumption, such as operating materials and supplies. The cost of a capital asset is its full life-cycle cost, including all direct and indirect costs for planning, procurement (purchase price and all other costs incurred to bring it to a form and location suitable for its intended use), operations and maintenance (including service contracts), and disposal. Capital assets may or may not be capitalized, i.e., recorded on an entity's balance sheet, under Federal accounting standards.
 - h. Major acquisition. Major acquisitions are determined by a department or agency and are capital assets that require special management attention because of their importance to the agency mission; high development, operating, or maintenance costs; high risk; high return; or their significant role in the administration of agency programs, finances, property, or other resources.
 - i. Value Engineering analysis. A systematic process of reviewing and analyzing the requirements, functions and elements of systems, project, equipment, facilities, services, and supplies for the purpose of achieving the essential functions at the lowest life-cycle cost consistent with required levels of performance, reliability, quality, or safety. These organized efforts can be performed by both a multidisciplinary team of in-house agency personnel and by contractor personnel.
 - j. Value Engineering Change Proposal (VECP). A proposal submitted by a contractor consistent with the VE clause(s) in the contract that, through a change in the contract, would lower the project's life-cycle cost to the Government without impairing essential functions, characteristics, or performance. The contract change requirement can be the addition of the VECP to the contract with attendant savings. VECPs are applicable to all contract types, including contracts with performance-based specifications.
 - k. Value Engineering Proposal (VEP). An in-house agency-developed proposal, or a proposal developed by a contractor under contract to provide VE services, to provide VE studies for a Government project/program.
7. Policy. Federal agencies shall use VE as a management tool, where appropriate, to ensure realistic budgets, identify and remove nonessential capital and operating costs, and improve

and maintain acceptable quality or program and acquisition functions. Senior agency management shall ensure that VE is used on all appropriate programs, including appropriate projects and acquisition programs that are supported by performance based and service contracts. Senior management shall establish and maintain VE programs, policies, procedures and controls to support the systematic, forward-leaning development and maintenance of the most effective, efficient, and economical and environmentally sound arrangements for conducting the work of their agencies, and to provide a sound basis for identifying and reporting accomplishments.

8. Agency responsibilities. To ensure that agencies can sustain a viable VE program capable of producing savings and performance improvements, agencies shall, at a minimum:
 - a. Designate a senior management official, if one has not already been identified, to monitor and coordinate agency VE efforts.
 - b. Develop policies, procedures, guidelines, and criteria for both in-house personnel and contractors, as necessary, to identify programs/projects with the most potential to yield savings from conducting VE analyses. The criteria and guidelines should recognize that the potential savings are greatest during the planning, design, and other early phases of project/program/system/product development. The criteria and guidelines should also recognize that the most significant results will be achieved by concentrating resources on major acquisitions and the highest dollar value programs for the Agency.

Agency guidelines shall:

- (1) Address the consideration and use of VE on all appropriate contracts, including contracts supporting major acquisitions as well as service and performance based contracts.
- (2) Address how to measure the net life-cycle cost savings from value engineering. The net life-cycle cost savings from value engineering is determined by subtracting the Government's cost of performing the value engineering function over the life of the program from the life-cycle savings generated by the value engineering function.
- (3) Identify dollar amount thresholds for projects/programs requiring the application of VE. The minimum threshold for agency projects and programs which require the application of VE is \$2 million. However, agencies may, at their discretion, establish lower thresholds for major acquisitions or projects that have a significant impact on agency operations. Thresholds may be reviewed by the agencies every five years to account for inflation and other changes.

- (4) Include criteria for granting waivers for the use of value engineering for all types of contracts, in accordance with the Federal Acquisition Regulation (FAR) 48.201(a).
 - (5) Provide for the consideration of environmentally-sound and energy efficient considerations to arrive at environmentally-sound and energy efficient results.
- c. Assign responsibility to the senior management official designated pursuant to section 8(a) above to grant waivers of the requirement to conduct VE studies on certain programs and projects. This responsibility may be delegated to appropriate officials.
 - d. Develop the guidance and tools and provide VE training to agency program and contracting staff responsible for developing, reviewing, analyzing, and carrying out VE analyses, VE change proposals, and evaluations, and to staff responsible for coordinating, monitoring and reporting on VE program efforts.
 - e. Ensure that funds necessary for conducting agency VE efforts are included in annual budget requests to OMB.
 - f. Maintain files on projects/programs/systems/products that meet agency criteria for requiring the use of VE techniques. Documentation should include reasons for granting waivers of VE studies on projects/programs, which met agency criteria. Reasons for not implementing recommendations made in VE proposals should also be documented.
 - g. Adhere to the acquisition requirements of the FAR, including the use of VE clauses set forth in FAR Parts 48 and 52.
 - h. Develop annual plans for using VE in the agency. At a minimum, the plans should identify both in-house and contractor projects, programs, systems, products, projects, etc., to which VE techniques will be applied in the next fiscal year, and the estimated costs of these projects. These projects should be listed by category, as required in the agency's annual report to OMB. VEPs and VECs should be included under the appropriate category. Annual plans will be made available for OMB review upon request.
 - i. Report annually to OMB on VE activities, as outlined below.
9. Reports to OMB. Each agency shall report the fiscal year results of using VE annually to OMB's Administrator for Federal Procurement Policy, except those agencies whose total budget is under \$10 million in a given fiscal year. The reports should explain the methodology used to calculate the savings, e.g., savings accepted at the conclusion of the VE study or at the time of manufacturing or construction. The reports are due to OMB by December 31st of each calendar year, and should include the previous fiscal year results as well as the current name, address, email, and telephone number of the agency's VE manager.

The suggested reporting format is provided in the Attachment.

Part I of the report asks for net life-cycle cost savings achieved through VE. In addition, it requires agencies to show the project/program dollar amount thresholds the agency has established for requiring the use of VE if other than \$2 million. If thresholds vary by category, show the thresholds for all categories. Savings resulting from VE proposals and VE change proposals should be included under the appropriate categories.

Part II asks for a description of the top five VE projects for the fiscal year. List the projects by title and show the net life-cycle cost savings and quality improvements achieved through application of VE.

10. Related guidance. For detailed guidance on how to account for the time value of money in value engineering analysis, refer to OMB Circular No. A-94, section 8.c. For detailed guidance on for using and administering value VE techniques in contracts, refer to FAR Part 48.
11. Effective date and implementation. This Circular takes effect 30 days after its final revisions are published in the *Federal Register*. Heads of departments and agencies are responsible for taking all necessary actions to achieve effective implementation of the revisions to the Circular, such as disseminating this Circular to appropriate program, acquisition, and other staff, reviewing and updating existing agency policies to ensure VE is considered and integrated into the planning of all appropriate programs, projects, activities, and contracts, and guiding the development of implementation strategies, including staff training.
12. Inquiries. Further information about this Circular may be obtained from the Office of Management and Budget (OMB), 725 17th Street, NW, Washington, DC 20503. Telephone 202-395-3501.

Attachment

